

# LEATH & ROSS,

## WHOLESALE AND EXPORT

# HOMŒOPATHIC CHEMISTS,

### 9 VERE STREET, W.,

AND AT 5 ST. PAUL'S CHURCHYARD, E.C., LONDON.  
Wholesale and Export Department—9 VERE STREET, W.

### OUR £10 10s. AGENTS' SHOW CASE.

Contents realise £17 17s. 8d.

DIMENSIONS.—Length, 18 in.;  
Breadth, 13 in.; Height, 13 in.



DESCRIPTION.—A Handsome Bent Glass Case, with three drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in the other two in alphabetical order.

### WHOLESALE PRICE LIST OF MEDICINES PUT UP READY FOR SALE.

PILULES—Sixpenny Bottles	—	2/9	per dozen.	TINCTURES—Sixpenny Bottles	—	2/9	per dozen.
Ninepenny	—	4/-	"	Shilling	—	5/-	"
Shilling	—	5/-	"				

Subject to Cash Discount.

### PROPRIETARY ARTICLES.

Neuraline	—	1/1½	Berberine	—	1/1½	Linimentum Auricularis	—	1/1½
Glykaline	—	1/1½	Chilblain Liniment	—	1/1½	Bryonia Liniment	—	1/1½
Phospho-muriate of Quinine	1/1½		Odontagie Essence	—	1/1½	Corn Eradicator	—	1/1½

All the above Proprietary Articles, 9/6 per dozen. Subject to Cash discount.

### OUR £6 6s. AGENTS' SHOW CASE.

Contents realise £10 18s. 3d.

DIMENSIONS.—Length, 20 in.;  
Breadth, 15½ in.; Height, 9½ in.



DESCRIPTION.—A Handsome Bent Glass Case, with two drawers, the contents of top drawer visible, the Pilules and Tinctures arranged in alphabetical order.



EXCLUSIVELY OBTAINED FROM

# "PUMILINE."



THE SNOW-CROWN PINUS PUMILIO.

## PUMILINE ESSENCE

Is a specially prepared volatile essence, distilled from a particular variety of pine, growing nearest the snow level on the Alps. It possesses exceptional medicinal properties when given internally, or in the form of inhalations, in the treatment of Pulmonary and Diathetic Affections, such as Phthisis, Rheumatism, Gout, &c. It is a valuable deodorizer and disinfectant, and has a peculiarly refreshing and fragrant odour.

## PUMILINE JUJUBES

For Sore Throat, Cough, Hoarseness, &c., they give immediate relief.

## PUMILINE LINIMENT

Specially beneficial for use in Chronic Rheumatism, Gout, Lumbago, Sciatica, &c. It is also invaluable for Throat and Chest Affections, and may be taken internally, in doses of 2 to 5 drops.

## PUMILINE PLASTER

Is most effective in Chronic and Muscular Rheumatism, Lumbago, Sciatica, and also for Chest Affections.

## PUMILINE EXTRACT

For Gout, Rheumatism, and Skin Disease; used in BATHS, Ointments, and Liniments.

## PUMILINE OINTMENT

For all Skin Affections, Irritations, Insect Bites, Burns, &c. This Ointment is a fine smooth homogeneous application. It gives immediate relief in the intolerable itching of Eczema, &c. It is unrivalled both as a medicinal agent and toilet requisite.

## PUMILINE SOAP

Is a carefully neutralised superfatted Soap, containing no free alkali, and is a Lubricant instead of a Desiccant to the skin. It is peculiarly adapted for use to the delicate skin of ladies and children. It leaves the skin smooth and satiny, and beautifies the complexion. The Pumiline Essence which it contains makes it a powerful disinfectant.

## PUMILINE DRY INHALER

Most effective and convenient pocket inhaler for use in Throat or Lung Troubles. Is invaluable for use during a fog or mist.

G. & G. STERN have so arranged their Price List that a *very large margin of profit* is left to Chemists and to the Trade generally. In consideration of this, as well as the fact *that no other* Pine Preparations are in any way equal to STERN'S PUMILINE, Chemists will find it much to their advantage to stock the Pumiline Preparations.

### PRICES—

	RETAIL	WHOLESALE.
PUMILINE ESSENCE .....	1/6 and 2/6 per bottle.....	15/ and 24/ per dozen.
PUMILINE EXTRACT .....	1/ per bottle.....	9/ per dozen.
PUMILINE JUJUBES .....	1/1½ and 2/3 per box .....	10/6 and 20/ per dozen.
PUMILINE OINTMENT .....	1/1½ and 2/9 per pot.....	11/ and 27/ per dozen.
PUMILINE LINIMENT .....	1/1½ and 2/9 per bottle .....	11/ and 27/ per dozen.
PUMILINE SOAP...(box of 3 cakes).....	1/6 and 9d., and 1/ per tablet.....	15/, 7/6, and 9/ per dozen.
PUMILINE PLASTER .....	1/1½ each .....	9/ per dozen.
PUMILINE DRY INHALER .....	1/6 each.....	14/ per dozen.

BESIDES WHICH AN ADDITIONAL DISCOUNT IS ALLOWED TO CHEMISTS AND THE TRADE.

**G. & G. STERN, 62 Gray's Inn Road, LONDON, W.C.**

Will send Show Cards and Literature Free on Application.



# A Safe and Reliable Soporific

DR. KINGSBURY (*British Medical Journal*, Oct. 12th, 1889) calls attention to "one special virtue of Sulphonal, which is that it can easily be administered without the knowledge of the patient, which cannot be said of bromides, hyoscyamine, &c. Recently I was able to keep a violent lunatic in a



perfectly tranquil condition for three days by the simple addition of Sulphonal to the patient's tea morning and afternoon, and coffee at bedtime, and without the slightest suspicion on the part of the invalid. In the insomnia of locomotor ataxia I have also had good results from Sulphonal."

Dr. Charles Macdowell, Carlow and Kildare Asylum (*British Medical Journal*, Oct. 12th, 1889), states that he had a somewhat similar experience with Sulphonal. Further, he says: "The Tabloids of Sulphonal, prepared by Messrs. Burroughs,

Wellcome & Co., I have found very reliable; each contains five grains of the medicine, and people who object to take a draught take them very readily."

Recent reports go to show that Sulphonal in Crystals or coarse powder is very insoluble.

Tabloids of Compressed Sulphonal are therefore recommended from the fact that the crystals are reduced to an impalpable powder by triturating machinery before compression, the solubility of the drug being thereby considerably promoted. They are best administered at bedtime, crushed in warm fluids.

"Sulphonal produces a natural sleep, from which the patient awakes refreshed and without any bad after-effects."—*British Medical Journal*.

Sulphonal Tabloids (5 gr.)—the most eligible form of the drug—are supplied in bottles containing 25 and 100, at 12s. and 36s. per doz. (subject to fluctuation of the market).

Sulphonal (Bayer) supplied to the Trade at 1s. 6d. per oz. (subject to the fluctuation of the market).

BURROUGHS, WELLCOME & Co., Snow Hill Buildings, E.C.

THE WHOLESALE & RETAIL  
**Druggists' Price Book**  
By D. ELLIOTT.  
NEW EDITION, revised according to the British Pharmacopoeia, 1886.  
Pocket Size. Bound in Leather. Price 8/1, Post Free 8/2.

THE CLINICAL  
**CLERKS' GUIDE**  
TO  
**URINE TESTING.**  
On 8-fold linen-lined card, 8 in. by 5 in.  
Price 7d.

**Labels of every description.**

**NOW READY FOR 1890,**

**SACHET, SILVERLOCK'S, CARD, AND HANGING**  
**PRESENTATION, ALMANACKS.**

**Chemists' Counter Bills, good quality, 7½ by 5 ... 10,000, 15/**  
**Chemists' Counter Bills, good quality, 9 by 5½ ... 10,000, 22/6**  
**Chemists' Slip Labels from 1/ per 1000; a reduction on large quantities.**

**Chemists' Counter Bills, second quality, 7½ by 5 ... 10,000, 12/6**  
**Chemists' Counter Bills, second quality, 9 by 5½ ... 10,000, 18/**  
**Chemists' Pill Labels from 1/3 per 1000; a reduction on large quantities.**

**H. SILVERLOCK,**  
Medical Label and General Printer,  
92, BLACKFRIARS ROAD, LONDON. S.E.

**ILLUSTRATED TRADE CATALOGUES, &c.**

**THE ANALYTICAL EXERCISE FORMS, FOR Chemical Students.**  
Arranged by H. BELCHER THORNTON, F.O.S.  
Price 8d. per doz. forms.

**HOW TO ANALYSE SIMPLE SALTS, SOLIDS AND SOLUTIONS.**  
Specially Intended for Beginners, by H. BELCHER THORNTON, F.O.S.  
8vo Demy, 40 pages. Price 1/1, Post Free.

**PAMPHLETS. SHOW CARDS. SAMPLES FREE BY RETURN OF POST.**

**PRICE LISTS. PROSPECTUSES. SAMPLES FREE BY RETURN OF POST.**





For the convenience of Chemists who are introducing these Instruments, we are now mounting same on an attractive Showcard, chocolate ground, gilt edges and gold letters. Price per doz. including 1 Card, 80/-; ditto, lens front, magnifying, 68/-; Morocco Pocket Case, containing 1 Bent and 1 Straight Clinical, 7/6 the set. Kew Certificates to any of the above, 12/ doz. extra.

*Special quotation for quantities.*

CHEMISTS commencing the Spectacle business will find these Show Cases arranged with an assortment of Spectacles and Folders of all sights, to meet the requirements of purchasers. The quality and quantity may be varied to suit any class of trade at customer's wish. The Spectacle Show Case is of Solid Polished Mahogany, well made and finished, to stand any climate. Large Coloured Show Cards sent with each case, with descriptive pamphlet, &c.

*In ordering through  
your Agents please state  
F. DARTON & CO.'S  
GOODS  
ONLY REQUIRED.*

Send for F. DARTON & CO.'S  
NEW PRICE LIST FOR 1888.

### A FACT!

Darton's 2 Guinea Spectacle Show Case	realises .. ..	£4 12s
Darton's 3 Guinea	ditto ditto ..	£7 6s
" 6 "	ditto ditto ..	£15 12s
" 10 "	ditto ditto ..	£28 15s

*\* This case we strongly recommend for Export.*



No. 1 Case, price £2 2s.; No. 2, £3 3s.; No. 3, £6 6s.; No. 4, £10 10s.; No. 5, £21  
Send for fully Illustrated Catalogue and Descriptive Pamphlet, with Table of  
Sights, post free on receipt of trade card.

**F. DARTON & CO.,**  
ESTABLISHED 1834.

WHOLESALE OPTICIANS  
Makers to  
Her Majesty's Government,

45 St. John St., West Smithfield, London, E.C.  
Telegraphic Address—"EXCEPTIONAL LONDON."

## FORD, SHAPLAND & CO.

MEDICAL LABEL & GENERAL PRINTERS, LITHOGRAPHERS, ENGRAVERS, &c., 6 GREAT TURNSTILE, LONDON, W.C.

## PRIZE AND OTHER NEW DESIGNS FOR COUNTER BILLS

NOW READY. Printed in Colours, on White and Coloured Paper, for Chemists' Advertising. A Great Novelty.

**ALMANACKS, ETC., FOR 1890**  
ARE NOW READY. WRITE FOR SAMPLES.

## ORDINARY COUNTER BILLS,

On GOOD WHITE PAPER, at LOWEST PRICES ever offered.

10,000 CROWN OCTAVO BILLS (7½ in. × 5 in.) 12/0  
10,000 DEMY OCTAVO BILLS (9 in. × 5½ in.) 17/6

ALL OTHER SIZES AT EQUALLY LOW RATES. SAMPLES AND PRICES ON APPLICATION.

# NOTICE OF REMOVAL.

MESSRS. R. GIBSON & SONS, OF MANCHESTER,

Medicated and High-class Lozenge Manufacturers,

Have pleasure in calling the attention of their numerous Customers, in and out of London, to their having Removed  
from Australian Avenue to a Commodious Warehouse,

**1 GLASSHOUSE YARD, ALDERSGATE STREET, LONDON, E.C.**

Where a large and complete Stock of their varied Manufactures will be stored. London Buyers can either see Samples at the Warehouse, or have them submitted upon application. A call, however, is respectfully solicited.

**CARLTON WORKS, MANCHESTER.**

February, 1890.



A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, FEB. 22, 1890.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

This Supplement will be given free to any Chemist and Druggist or Assistant who will call for it at 42 Cannon Street on Friday afternoon, or will be posted on Fridays to any one who sends an addressed postal wrapper.

OFFICES: 42 CANNON ST., LONDON, E.C.

### CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.

CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. Orridge & Co. has been known as a Transfer Agency since the year 1843, and is well known to all the leading firms in the trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—£800.—LONDON.—Central position; good-class Retail and Dispensing; returns £800 yearly; *gross profits over 50 per cent.*; handsomely fitted shop and good stock; about £800 required.

2.—£1,100.—LONDON.—Suburbs: Mixed business; returns over £1,100; good opportunity for a brisk pushing trade; house and garden; held at a very moderate rental; price about £300.

3.—£450.—LONDON, S.E.—Retail, Dispensing and Prescribing; returns nearly £450; double-fronted shop, well stocked; comfortable seven-roomed house and garden; rent very moderate; price about £240.

4.—£1,200.—LONDON, E.C.—Retail and Family Dispensing Business, with good Specialties attached; average returns £1,200 yearly; good house, warehouse, &c.; well adapted for Wholesale; price about £1,000.

5.—£475.—LONDON, W.—Very good-class Dispensing and Retail Family Business; returns last year nearly £475, *all good profitable trade*; well-fitted shop; good house, held on lease at moderate rental; price £450.

6.—£2,000.—HOME COUNTIES.—Mixed Business; returns about £2,000 yearly; business suited to a good business man, accustomed to a pushing trade; price £1,000.

7.—£800.—SURREY.—Good Agricultural town; old-established select business; specially suitable to a good practical Chemist; returns £800 yearly; *very profitable*; comfortable house, with garden; price £750.

8.—£800.—SEAPORT (WEST OF ENGLAND).—Retail and Prescribing; *very profitable*; situate in a main street; returns about £800 yearly, nearly all cash; the shop is situate at a corner; good house; price £475 cash.

9.—£700.—SUSSEX.—First class Dispensing and Retail; established many years; returns nearly £700 yearly; full prices for everything; modern fitted shop; comfortable house, with garden; rent low; price £640.

10.—£550.—SOUTH OF ENGLAND.—Seaside; Dispensing, Prescribing, and Retail; very good class; held by vendor over 20 years; returns £550, *with profits above the average*; handsome shop; good house, garden, and greenhouse; price one year's returns.

11.—£1,150.—WILTS.—Old-established Retail and Dispensing Business and Wine Trade, situate in the best position in a good business town; returns about £1,150; *very profitable*; good house, and large garden; held on moderate rental; price about £1,100.

12.—£500.—SOUTH OF ENGLAND.—Retail and Prescribing Business, established many years; present rate £500 yearly; good prices; well-fitted shop, good-sized house, and small garden; rent moderate; price about £450.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. Orridge & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

### SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.  
ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

### PARTNERSHIP.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**PARTNERSHIP** or otherwise.—£2,000 required to further extend an established Wholesale and Manufacturing Patent Medicine Business, dealing in three registered and protected profitable specialties; no technical knowledge necessary, and personal services optional; good income can be relied on, the business being thoroughly genuine and open to strict investigation; to anyone desirous of acquiring an interest in a high-class lucrative concern this is an opportunity that rarely occurs. Messrs. Browne & Co., Accountants, 22 Buckingham Street, Strand.

### APPRENTICESHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**WANTED**, an Apprentice; must have passed the Preliminary examination; outdoors preferred. Apply, "Fides," 13 Downs Park Road, Hackney.

**SITUATION** as Apprentice at first-class Pharmaceutical and Photographic Chemist; passed Preliminary; Bristol or near preferred; aged 16. W. Woodland, St. Alban's Road, Leloeater.



**F. J. BRETT,**  
VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

**BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.****LEICESTERSHIRE.**—Unopposed Light Retail and Prescribing; returns £330, one half nett profit; price £270.**YORKSHIRE.**—Light Retail and Prescribing, in good position; returns £550; under personal attention £1,000, and can be again; valuation about £450.**SOUTHAMPTON.**—Returns about £300; price £90.**LONDON, S.W.**—Light Retail; returns £500; Post-office worth £40 per annum; price £300.**HANTS.**—Retail; much neglected; excellent chance for young energetic man; price £120.**SURREY.**—Unopposed Retail, with fittings; Agency; returns £1,150; Appointment worth £65 per annum; price £800.**SOMERSET.**—Seaside; returns £900; all Light Retail; easily worked; price about £700.**MESSRS. BERDOE & CO.**

CHEMISTS' TRANSFER AGENTS &amp; VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

**VENDORS** will find our Offices a quick medium for the Sale of genuine Businesses. Strict confidence guaranteed. Several good-class Businesses wanted returning £700 to £1,500. Town or country.**PURCHASERS** are invited to apply (stating their requirements) for particulars of businesses, sent free on application.**NO CHARGE TO PURCHASERS.****HANTS.**—Death vacancy; Light Retail; returning, under management, £12 to £14 weekly; rent £40; good house; the widow is very anxious to sell, and will accept £300 cash.**SOMERSET (Coast).**—Light Retail, Dispensing, and Prescribing; returns £900; same hands 10 years; 9-roomed house; long garden; price £700, or valuation; every investigation allowed.**WARWICKSHIRE.**—Light Retail and Dispensing Business, occupying a good corner position in important town; same hands many years; returns £600; price, valuation about £500.**KENT.**—First class town; centrally situated Light Retail, Dispensing, and Prescribing Business; returns £700; same hands 20 years; price £625, or offer; can be increased.**WEST OF ENGLAND.**—Same hands 20 years; Retail, Dispensing, and Prescribing; returns £2,500; net profit £550; low rent; good house; price £1,400; stock and fixtures worth £1,200.**MIDLANDS.**—Branch Business in best suburb of large town; returns £850 by manager; principal would do £1,200; rent £35; price £600, or offer; owner retiring.**WILTS.**—Market town; very profitable Light Retail and Dispensing Business; good house and garden; returns £1,250; same hands 10 years; price £1,000, or offer.**DEVON.**—Light Retail, Dispensing, and Prescribing trade, returning £800; showing large profits; owner retiring; will give a good introduction; price £500; every investigation.**EAST COAST.**—Seaside resort; Retail and Dispensing; same hands 10 years; returns £500; good profits; price £425.**LONDON, S.W.**—Main road; Light Retail, Dispensing, and Prescribing; returns £500 by assistant; low rent; price £275.

Terms for Sale and Valuation on application.

Messrs. Berdoe &amp; Co., 30 Jewry St., Aldgate, London, E.C.

**BUSINESSES FOR DISPOSAL.**

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**O**WING to ill-health, a small Business in a rapidly rising country town; suitable for a beginner with small capital. M. N. Forlands, Binfield, Berks.**T**O be Disposed of, a Chemist's Business, situated in a Yorkshire manufacturing village (population 2,000); returns about £7 weekly; good house and shop; no opposition. Apply, E. c/o Hirst, Brook & Hirst, Leeds.**R**ETAIL and Prescribing Business; returns under manager average £450; well stocked and good fittings; capable of great increase; price £300. "Veritas," c/o Messrs. Heaton, Squire & Francis, 33 Southwark Street, London, S.E.**C**HEMIST'S and Druggist.—Established 1811; close to King's Cross; rent only £73, £50 let off; satisfactory reasons for selling; price only £200, including everything; a genuine bargain. James W. Coade, 152 Southampton Row, W.C.**Mr. G. B. CROCKER,**Trade Valuer, Transfer Agent, & Accountant,  
**15 WALBROOK, E.C.****SOUTH OF ENGLAND.**—A Light Retail and Dispensing Business; recently doing £2,000 a year; about £1,300 capital required to purchase.**WEST OF ENGLAND.**—Retail and Dispensing Trade; returns nearly £1,000 yearly; good house and garden; low rent; price £700, or small premium and valuation.**WORCESTERSHIRE.**—Country Retail and Dispensing Trade (a little mixed); returns £2,000; price £1,000, or valuation; terms can be arranged; a sound concern.**SURREY.**—Light Retail and Dispensing; returns £1,150; price about £850; net profit £450; rent more than made by valuable agency.**LONDON, S.W.**—Good-class Family and Dispensing Business; returns £800; net profit £300; price £600; 200 houses; low rent.**LONDON, S.E.**—Good Ready-money and Prescribing trade; very profitable; returns £800; price £700.**LONDON, S.E.**—A ready-money and Prescribing Business; returns £500 under Junior; price £250, part can remain; proprietor has another business.

Valuations for Probate or Transfer conducted in any part of the United Kingdom. Terms on application.

**BUSINESSES FOR DISPOSAL—Continued.****£1,000 CASH.**—Old established suburban Dispensing Business; good prices; good house and well-fitted shop; rent low; returns for last 12 years average over £1,000; no agents, and cash only. Apply, Harman, 8 Davis Street, Park Road, Liverpool.**C**ASH Practice and Chemist's Retail in a populous neighbourhood in W.C. district; receipts £4 a week; good corner house, well let off; price £175. Apply to Wm. Hornbrook, Medical Agency, 17 Bloomsbury Street, Oxford Street, W.C.**K**ENT.—About 8 miles from London, the Fixtures and Bottles in an old-established Business, with nucleus of trade; immediate possession; low rental; excellent opportunity for a young man with small capital; £100 only required. Apply, Orridge & Co., 32 Ludgate Hill (personal application if possible).**T**O be Sold or Let, the Dwelling-house and Business Premises, No. 21 High Street, Bridlington, Yorkshire, now occupied by Mr. R. Gatenby, Oberlin, and for many years previously by the late Messrs. Rayner & Cooper, Chemists and Druggists. For particulars apply to Messrs. Harland & Son, Solicitors, Bridlington.**W**ARWICKSHIRE.—For disposal, as a going concern, an old established Chemist's Business, with well fitted and stocked shop in good condition, and in pleasant and highly respectable neighbourhood; returns under bad management £450; premises to be sold or let on lease. Apply, Peirson & Son, Chartered Accountants, Coventry.**F**OR immediate disposal, in consequence of illness, a small Business, well situated in prosperous watering-place on East Coast; an energetic young man, with small means, would find this a good opening, as it can be purchased on most reasonable terms. For particulars apply to Grinwade, Ridley & Co., Wholesale Druggists, Ipswich.**C**HEMIST and Dentist.—For disposal, an old-established Business, in best position for extending business; an introduction given to purchaser; present proprietor retiring from business; excellent profits; ready money; town rapidly increasing; an opportunity seldom met with. Full particulars on application to Marshall, Devonshire Buildings, Runcorn.**I**MMEDIATE—Old-established Light Retail; beautifully situated; county market town; population 3,000; two chemists; large double-fronted shop; rent £16; cost £450 to immediate cash purchaser; vacant on or reasonable offer. N.B.—This business offers rare advantages for general extension, in Dentistry exceptional. "Proprietor," 42 Castle Street, Shrewsbury.**M**ANCHESTER.—Increasing well-established Chemist's, Drysalter's, Wine and Spirit Business; first class neighbourhood; low rent; large premises; reasons for selling; establishing manufacturing premises for two specialities in good demand; fixtures and goodwill, £250; stock at valuation, about £500. Apply, by letter, W. Mabon, 29 Blantyre Street, Manchester.**G**ENUINE, old-established, very good Prescribing, Light Retail, Dispensing Business in a thriving, healthy suburb of large city; full prices; several specialities and proprietaries; constant sale; returns £650 net; profits over £200; price £500; good house, side entrances and garden; rent £30; unusual opportunity. "Medicus," Cumberland House, New King Street, Bath.**L**ANCASHIRE.—Manufacturing town, agricultural district; a General, Retail, Prescribing, and Country Business, centrally situated near to principal market; returning about £400; double-fronted shop and good house (at low rent), £40 per annum; stock and fixtures at valuation, about £300. Also small Retail and Prescribing Branch Business; corner shop, in central busy street; under management, neglected; returns last year £250; rent £30; price £100, or valuation. For further particulars apply to "Isinglass," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.



**TO** Chemists and Druggists.—To be disposed of, in consequence of owner's removal to London, a first class, old-established Chemist and Druggist's Business in a large manufacturing town in Lancashire. The premises are of commanding appearance and situated in one of the best thoroughfares in the town, and a commodious house is attached. An improving and valuable Tobacco and Cigar business is also carried on. The Chemist's shop, to which an "off" Wine License is granted, is exceedingly well stocked and fitted, and is capable of doing a very good trade. The recipe of a patent medicine will be given to the purchaser. Every information as to turnover and connection will be given to intending purchasers; principals only dealt with. To treat, apply to Tatton & Britton, 29 Fountain Street, Manchester.

## BUSINESS WANTED.

**BUSINESS** Wanted, returning about £1,000; state net profit and size of house, and if any garden. "Major," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

## TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**TO** be Let, a first class Chemist and Druggist corner shop; established over 40 years; rent £70; open to offer. Apply to W. & J. Venmore, 55 Great Homer Street, Liverpool.

**TO** Chemists and Druggists.—Commanding corner business premises, in best part of East Putney, to let; rent £60. Also one other smaller premises, near Clapham Junction; rent £55. Warren & Lowther, Auctioneers, West Hill, East Putney.

**PLYMOUTH.**—To be Let, at Lady-day next, No. 30 Frankfort Street, a shop and premises in good business thoroughfare, where the trade of a Chemist has been successfully carried on for 43 years. Apply to R. E. Bright, Devon and Cornwall Bank, Plymouth.

## SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

**JUNIOR** Assistant; accustomed to a mixed country trade. Ison & Son, Wellington, Salop.

**WANTED.** Assistant (outdoor). Apply, stating qualifications and height, to Magor, 123 Corporation Street, Birmingham.

**JUNIOR** Assistant, with knowledge of Mechanical Dentistry. H. T. Neuten, Chemist and Dentist, 15 and 16 Manor Street, Stonehouse, Devon.

**WANTED,** an Improver who has served part of his apprenticeship, or an Apprentice; Midlands preferred. R. S. Gould, Harborne, Birmingham.

**AN** Improver or Junior; one accustomed to Homoeopathic Dispensing preferred. Apply, stating age, height, salary, &c. Tirrell, Homoeopathic Chemist, Hanley.

**WANTED.** a Qualified Assistant; must be thoroughly reliable. State age, height, and salary, enclose photo (will return), to Coleman, Chemist, Wolverhampton.

**WANTED,** at once, Dispenser with Minor qualification; hours 9 to 7; outdoor; no Sunday duty. Apply by letter, stating salary required, &c., to the Chemist, Haymarket Stores, 23 Haymarket, London, S.W.

**A** GOOD Dispenser and Retailer required on March 1st; qualified preferred; aged 23 to 25; permanency for suitable applicant; hours easy. Photo and particulars to Cowper, Chemist, Perth.

**IMMEDIATELY.**—A competent Dispenser for good-class business; must be gentlemanly, active, and a good writer; comfortable home. Send photo, salary, and particulars to Judd & Co., Chemists, Leamington Spa.

**WANTED,** a smart Junior Assistant (indoors), with a fair knowledge of dispensing and good-class retail. Apply, with full particulars, enclosing carte, to be returned, to Poole & Son, Chemists, Newcastle, Staffs.

**W. K. INGLIS** The Pharmacy, Delph, requires a registered Assistant to manage small Retail; duties light and salary moderate. Applicants please give full particulars to save unnecessary correspondence.

**TO** Dispensers.—Wanted, at once, a Dispenser (outdoors); must be qualified and under 35 years of age; no Sunday work. Apply by letter, stating experience and salary required, to R. D. W., 136 Queen Victoria Street, E.C.

**INDIA.**—Wanted, a Marag'n; Assistant, fully qualified, capable of taking entire charge of a Branch establishment in the Punjab. Write, stating qualifications, with copies of testimonials, to J. Bruce Gillon, 83 Bishopsgate Street Within, E.C.

**WANTED,** strong lad for Wholesale Druggists' Packing Floor. Apply, P. Office of THE CHEMIST AND DRUGGIST, 42 Cannon St., E.C.

**JUNIOR;** accustomed to good-class business; age about 23. Address, with photo and copies of recent testimonials, J. E., 135 Queen's Road, Brighton.

**HASTINGS.**—A gentlemanly Assistant, about 25, qualified, well accustomed to good front counter trade. Apply, with carte, and usual particulars, Jameson & Curtis, Hastings.

**WANTED,** active and energetic Junior Assistant for Counter; tall, of good address, and well recommended. State age, height, salary required, and enclose photo to S. Waad, Chemist, Leicester.

**AT** once, a Junior Assistant, age about 21 years, accustomed to Mixed Retail business; please enclose photo (to be returned), and state age, height, and salary required, indoor. Address, "Jannior," 42 High Street, Crews.

**WANTED,** Junior Assistant (indoor); good counterman and dispenser; age 21 to 23; Protestant and abstainer preferred; unexceptionable references required; photo, to be returned. Apply, J. B., 32 Victoria Road, Widnes.

**WANTED,** a Traveller, having a connection with Chemists and Druggists in Ireland, to represent a firm of Manufacturers on commission in that country. Apply, by letter, to "Alpha," Office of THE CHEMIST DRUGGIST, 42 Cannon Street, E.C.

**OUTDOOR,** immediately, an active and energetic Assistant, as counterman, for a brisk ready-money business where 4 are kept; salary to commence at £90. Apply with photo, stating age, height, and experience, to E. J. Kitson, City Drug Stores, Worcester.

**TRAVELLER** for Yorkshire and Lancashire (qualified preferred), to represent firm of Wholesale Druggists and Drysalers. State salary desired, enclose carte and references (which shall be returned) to "Steam," Messrs. Balss Brothers, New Brown Street, Manchester.

**AT** once, competent Assistant (indoors) for front counter; cash business, N.W.; liberal and progressive salary to suitable man seeking permanency. Apply, giving full particulars of experience, &c., to H., 199 Upper White Cross Street, E.C. Also Junior wanted, not under 21.

**AN** Assistant (outdoor) wanted immediately; to one desiring a permanency; must be a good Dispenser, and able to put up stock and specialties. Apply, stating age, height, salary required, with references (which must be unquestionable), to William J. Bray, High St., Romford.

**JUNIOR** Assistant; accustomed to Dispensing and General Retail business; must be quick, active, and obliging; references must bear every investigation; comfortable home offered. Send carte, to be returned. Apply, "Pharmacist" Walker, Troke & Co., 82 City Road London.

**WANTED,** a first class representative, who has had experience in calling on medical men in the provinces in connection with improvements in Pharmacy. Apply, with full particulars as to experience, age, &c., to "Chippis," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** South Africa.—Wanted, at once, under a three years' engagement, as Assistant, holding Minor qualification and of good address, between 23 and 25 years of age; salary commencing at £150 per annum, with free passage out. Apply, with full particulars, to M., care of B. G. Leanon & Co., 14 Bunhill Row, London, E.C.

**IMMEDIATELY.**—A Junior Assistant; a quick and accurate Dispenser; good writer; for first-class Family and Dispensing Business; state age, experience, height, salary expected (indoor), and references; also enclose photo, which will be returned. Apply, T. C. Taylor, 20 Long Row, Nottingham.

**WANTED,** immediately (London suburb), a young man with two or three years' experience in the trade; one accustomed to Mixed business not objected to; state age, height, experience, reference and salary (outdoor). "Theta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**SENIOR** Assistant; qualified; indoors; aged 30 to 40; a thoroughly responsible, energetic man, of good address and mature experience, for a high-class Dispensing business. Apply by letter, with full particulars, carte, and state salary required, to Edward C. Perks, 1 Sloane Square, S.W. Also a Junior (qualified preferred).

**FOR** March 1st.—A Junior Assistant, about 22 years of age; must be a quick, neat, and accurate Dispenser, writing a good hand, gentlemanly, and well recommended; only thorough business young men need apply; preference given to those desiring a permanency; personal applications if possible, otherwise send very full particulars to Evan Hughes, 9 Goldhawk Road, W.

**QUALIFIED** Assistant (indoors); active, and capable of taking entire management when required; thorough knowledge of Homoeopathic Dispensing, and some experience of Photographic Chemicals preferred, but not absolutely necessary; short hours, and three Assistants kept. Apply, stating height, salary required, and usual particulars, "Midlands," care of Barclay, 95 Farringdon Street, London.

**DISPENSER** Wanted.—Part-Time Situation.—The Hull Friendly Societies' Medical Institute requires the services of a competent, quick, and accurate Dispenser; hours, 9 to 11 a.m. and 6 to 8 p.m., except Saturdays, when duty finishes at five; no Sunday duty; splendid opportunity for a suitable man requiring time for study; salary not to exceed £52. Apply, enclosing photo, stating age, experience, and references, to Medical Officer, 36 George Street, Hull.



## SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

- ASSISTANT** in a Mixed Business. R. Clark, Calstock, Tavistock.
- PART** time; 7 years' experience; London. "Student," 35 Trinity Square, Borough.
- AS** Improver; aged 22; 5 feet 9 inches; small salary. S. G., 8 Eastgate, Warwick.
- PART-TIME**; aged 27; good experience; disengaged. "Statim," 65 Euston Road, N.
- JUNIOR**; good experience; active; Retail preferred. W. J. Barrow, 138 Stanhope Street, N.W.
- ASSISTANT** or branch manager, London; thoroughly experienced. B., 3 Wyndham Street, W.
- TEMPORARY**; outdoors; branch; Minor; experienced. T., 113 Riversdale Road, Highbury, N.
- LOCUM-TENENS**; 27; good Dispenser and Prescriber; well experienced. "Chemious," Bingham, Notts.
- ASSISTANT**; no objection to travel; good references; aged 27; outdoors. J. W. C., Winthorpe, Newark.
- TEMPORARY** or permanent; aged 29; prescribe and extract. E., 35 Langham Street, Walton Road, Liverpool.
- DISPENSER** to Surgeon; qualified; aged 22; London experience; good references. H. H., 225 New North Road, N.
- AS** Traveller, by Chemist, 14 years' experience of drug trade. Address, with particulars, "Specs," care of 196 Belsize Road.
- JUNIOR**; 7½ years' experience; disengaged; aged 22; London preferred. Loc, 6 Sunnyside Road, Hornsey Rise.
- ASSISTANT**, aged 21, height 5 ft. 1 in., 6 years' experience; good references. R. Hall, 76 Mill Street, Maccolesfield.
- AS** Assistant, London preferred; excellent references; good experience. G. Taylor, Bossinney, Tintigell, Cornwall.
- LOCUM-TENENS** during absence; long experienced; gentlemanly address; moderate terms. "Ph. Ch." 39 Powis Square, W.
- DISPENSER** to Surgeon, or part-time Assistant; 21; tall; 6 years' experience; good references. "Ajax," 16 Tybridge Street, Worcester.
- ASSISTANT**; Family and Dispensing Pharmacy; aged 22½; height 5 ft. 8 in.; 6 years' experience. Harding, Hartland Road, Fareham, Hants.
- JUNIOR**, middle April; 7 years' experience; Prelim.; prescribe, dispense; time to attend Wills' evening classes. Waters, North Walsham.
- JUNIOR** Assistant; aged 20; height 5 ft. 9½ in.; 3½ years' experience in retail business. Apply to J. D. F., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- SOUTH AFRICA**.—Chemist (Qualified) desires an appointment in Cape Colony. Address, "Kimberley," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- SUNDRIES**; as Manager or Traveller, or Traveller for Drugs; excellent references; aged 30. "Veritas," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- AS** Assistant; Dispenser; locum tenens; 10 years' references; well up in laboratory work and prescribing; permanency preferred; smart appearance; good organizer. "Tempus," 93 Liverpool Road, N.
- TRAVELLER**, Wholesale Drug Trade, open for engagement end of March; large experience and connection in West, South-West, Midlands, and South Wales. Address, "Limols," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- TO** Wholesale Houses and Manufacturers—Traveller with large connection amongst Grocers, Stores, Chemists, &c., in Bristol and adjoining counties, is open for engagement; highest of references; aged 30. Address, "Francis," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- MANAGER**, or with view to Succession or Partnership.—Advertiser (30), Senior Assistant several years in one of the leading Houses of the trade, is anxious to meet with a suitable opening for his ability, energy, and capital; as Manager simply not less than £4 a week accepted; communications strictly confidential. Apply, "Exceptional," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

- LOCUM TENENS** or Manager of Branch, by experienced man, aged 36. M. S., 18 Laura Place, Southampton.
- OUTDOOR** Assistant (London); good experience; Hall qual. Reaction. F. T. H., 10 Stafford Street, Lisson Grove, N.W.
- TOWN** Traveller or locum-tenens; 20 years' experience; highest references. J. E., 9 Albion Road, Lewisham, London.
- ASSISTANT** or Manager; accustomed to first-class Retail and Dispensing; Major; permanency. Jones, Queen Street, Llandoverly.
- AS** Dispenser and Bookkeeper to Surgeon, to Manage a Retail, or work up one intended for sale; qualified. H., 41 Camberwell Road, S.E.
- JUNIOR** or Assistant (outdoors); 18 months out of trade; no salary first month. "Chemious," 19 Ostler Terrace, Winton, Street, Leeds.
- ASSISTANT** or Branch Manager (29); married; qualified; abstainer; good experience and recommendations. A., c/o Maben, Chemist, Hawick.
- ANALYTICAL** Chemist (30); also qualified as Pharmacist; Dr. Phil.; demonstrator, Leipzig; excellent references. X., 13 Worcester Place, Oxford.
- AS** Traveller (London and suburbs); aged 31; good references; salary and commission. "Fides," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.
- JUNIOR**; aged 21; height 5 feet 10 inches; outdoors; 6½ years' experience in good Retail and Dispensing; Leeds preferred. J. B., 22 Portland Street, York.
- BRANCH** Manager, with intimate view to succession; 23 (Minor and Hall); tooth extractor, &c.; early next month; hours, salary, &c. M. L., Evans, Gadd & Co., Exeter.
- WHOLESALE** Druggists and Druggists' Sundriesmen.—Advertiser (23) seeks position of trust; thorough knowledge; highest references. O. W., care of C. T. Lewis, 61 King William Street, E.C.

## MISCELLANEOUS.

Special charges are made for Advertisements under this heading, which can be obtained on application.

**PERSONS** wishing to Purchase or Sell their Businesses will do well to communicate with Messrs. Fowler & Miller, Chemists' Transfer Agency for the North of England, 60 Fawcett Street, Sunderland.

**DENTISTRY**.—First-class Mechanical work undertaken for the Profession at moderate terms; good West-end references as to ability, &c.; punctuality guaranteed. W. E. Hill, 220 High Holborn, W.C.

**WHO** can give instructions (in consideration of pecuniary compensation) for removing the superfluous oil from ground mustard seed and for making mustard powder? and who can supply the necessary machines for same? Address, F. C. 596, care of Haassenstein & Vogler, A. G., Leipzig.

## PRELIMINARY AND MINOR.

**ALL** Students who are preparing should send for particulars of a method of study which will enable them to pass with ease. Enclose stamped envelope to Mr. J. Tully (Hills Prizeman), Chemist, Hastings. Established 1872. References to past and present Pupils. Student's Herbarium, 100 specimens, 7s. 6d., post free.

## STUDENTS' AIDS TO EXAMINATION.

**PRELIMINARY**.—Arithmetic and Metric System, 1s. How to Write an Essay, 3d. Caesar Simplified, 1s. Knotty Points in Latin Grammar, 1s. 6d. **MINOR**.—Equations Simplified, 1s. Illegible Autographic Prescriptions, 1s. Notes on Dispensing, 1s. Prescriptions given at the Minor, 6d. "Chemist," care of Mr. J. Edwards, Wye, Kent.

## GLYCERINE &amp; CUCUMBER,

First Quality, 9d. per lb., by using

## Rouse's Concentrated Cucumber Paste.

In Jars (free), ½ lb. 2s. 3d.; 1 lb. 4s. 3d. net.

Making 3 lbs. and 6 lbs., costing ½d. per oz., by simply adding Water and Glycerine.

Thro' any Wholesale House, or post free for P.O.

**ROUSE & CO.,** 12 WIGMORE ST., LONDON, W.



# THE CENTRAL SCHOOL OF CHEMISTRY AND PHARMACY,

173 MARYLEBONE ROAD, N.W.

For Prospectus apply to MR. JOHN WOODLAND.

## THE CITY SCHOOL OF CHEMISTRY & PHARMACY, LIMITED, 27 CHANCERY LANE, LONDON, W.C.

The Evening Classes are held on Tuesday, Wednesday, Thursday, and Friday, 6 till 10.  
Fee from Half-a-guinea per month.

Full particulars of Mr. MAURICE WILLIAMS, Managing Director.

MAJOR, MINOR, AND PRELIMINARY EXAMINATIONS OF PHARMACEUTICAL SOCIETY.



### Look!

We thank our Customers for the patronage so kindly bestowed upon us, and beg to remind them they will find us ever ready to place the resources of our office at their disposal.

**BOWERS BROTHERS, Printers**  
89, Blackfriars Road, and  
25, Canterbury Road, Brixton, S.E.

### Important Features.



NEWEST SHADES IN INKS.  
NOVELTIES IN PAPER.  
LONG EXPERIENCE.  
ORIGINAL IDEAS.  
LATEST DESIGNS.  
FAST PRESSES.  
CHEAPNESS.

Write for Estimates & Specimens.

### Listen!

FINE SATISFACTORY.  
APPROPRIATE.  
ATTRACTIVE.  
ARTISTIC.  
QUAINT.  
PLAIN.  
ODD.

### PRINTING

WHAT APPEALS MORE PERSUASIVELY?

Bowers Brothers, Blackfriars, London, S.E.



## SUCCESSFUL ADVERTISING OR THE ECONOMICAL WAY OF REACHING THE PEOPLE IN THEIR HOMES

To be obtained for One Stamp from the  
HALF-PRICE CLOSED LETTER COMPANY, LIMITED,  
85 Gracechurch Street, London, E.C.,  
who are supplying (through their Agents) A  
PENNY POSTAGE STAMP, a Patent Safety  
Envelope, and a Sheet of Letter or Memorandum  
Paper for 1/2d. The Company effectually brings  
any Patent Medicine or Household Speciality  
before upwards of a Quarter of a Million  
of people in their homes for £1 upwards.  
In addition to which it gives free to Advertisers  
(as a bonus) Penny Postage Stamps to the value  
of half the money so spent in Advertising.  
Write for particulars.

PRIZE MEDAL,  
International  
Health Exhibition,  
1884.

THE NEW PERMANENT

## ENGRAVED WINDOW TABLETS

AWARD OF MERIT,  
International  
Sanitary Exhibition,  
1881.

IN RUBY, BLUE, AMBER, AND OPAL GLASS.

Send particulars of size, subject matter, and colour, when price for one Tablet and upwards will be sent.  
For Proprietary Articles, 100 8x6 Ruby Tablets, £3 15s. 0d.

**J. R. CORSAN, THE LONDON SAND-BLAST WORKS, 80 GRAY'S INN ROAD, W.C.**  
TO PREVENT FRAUD, DEMAND BUSINESS CARD FROM TRAVELLERS.

Now Ready, Second Edition, Crown 8vo., price 5s.

## A PRACTICAL MANUAL OF VENEREAL AND GENERATIVE DISEASES:

Including SPERMATORRHOEA, PROSTATORRHOEA, IMPOTENCE,  
and STERILITY in Both Sexes.

By **M. K. HARGREAVES, M.D.**

Assistant Physician to St. John's Hospital for Diseases of the Skin.

LONDON: R. KIMPTON, 182 WARDOUR STREET, LONDON, W.

### TO CHEMISTS.

### INCREASE your INCOME

By the Sale of my "IMPROVED"

## INDIARUBBER STAMPS.

Best and Cheapest. Orders executed in one day

Most liberal terms. Specimens, Price Lists, &c., post free.

**A. W. POLLARD,**

YE "OLDE LUDGATE" WORKS,

## LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

President—THE LORD ENRY. Chairman—MAJOR WM. VAUGHAN MORGAN.

Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 42 Nurses for Ward Nursing and Nursing Invalids at their residences.

G. A. CROSS, Secretary-Superintendent.

## "A HOME IN SICKNESS."

FOUNDED 1880.



## BOLINGBROKE HOUSE,

WANDSWORTH COMMON,  
SURREY.

## A PAY HOSPITAL

(aided by Voluntary Contributions)

For Persons who are able to pay, wholly  
or partially, for their support.

PRESIDENT:

RAILWAY STATION,  
CLAPHAM JUNCTION. CANON ERSKINE CLARKE, Vicar of Battersea.

Fees, from Half-a-Guinea to Three Guineas a week, for Nursing, Board, Lodging, and Services of a Resident Medical Officer. The Surgical cases are under the charge of a Hospital Surgeon.

Patients may avail themselves of the services of their own Medical



46, HOLBORN VIADUCT,  
LONDON, E.C.,  
December 23rd, 1889.

# LACTOPEPTINE.

## ADVANCE IN PRICE.

From and after January 1st, 1890, the prices of

### LACTOPEPTINE

will be as follows:—

1-oz. (4/6 size) ... ..	42/6	per doz.
Gross and upwards ... ..	38/-	„
4-oz. (14/- size)... ..	12/6	each.
Dozen and upwards ... ..	11/-	„
8-oz. (27/- size)... ..	23/6	„
Dozen and upwards ... ..	21/-	„

### UNSTAMPED, FOR DISPENSING ONLY.


(Cost of Stamp deducted.)

4-oz. ... ..	10/6	each.
Dozen and upwards ... ..	9/-	„
8-oz. ... ..	20/6	„
Dozen and upwards ... ..	18/-	„

The small size (1-oz.) retailing at 4/6 is not sold  
unstamped for dispensing.

### UNSTAMPED, FOR EXPORT.

1-oz. ... ..	35/-	per doz.
Gross and upwards ... ..	32/-	„
4-oz. ... ..	10/6	each.
Dozen and upwards ... ..	9/-	„
8-oz. ... ..	20/6	„
Dozen and upwards ... ..	18/-	„

 Terms Net Cash, Monthly Account.

JOHN MORGAN RICHARDS.

46, HOLBORN VIADUCT,  
LONDON, E.C.,  
December 23rd, 1889.

# CARTER'S LITTLE LIVER PILLS

## NOTICE.

From and after January 1st, 1890, the price of

CARTER'S LITTLE LIVER PILLS  
will be 9/- per doz. net.

CARTER'S LITTLE NERVE PILLS  
will be 9/- per doz. net.

CARTER'S IRON PILLS  
will be 22/- per doz. net.

CARTER'S LIVER BITTERS  
will be 36/- per doz. net.

CARTER'S BACKACHE PLASTERS  
will be 9/- per doz. net.

### IN QUANTITIES OF 5 GROSS AND UPWARDS.

 Terms Net Cash, Monthly Account.

JOHN MORGAN RICHARDS.

SOLE AGENT.

# ECKELAERS' SOAPS.

The Celebrated Toilet Soaps and  
Perfumery of L. Eeckelaers,  
Brussels, gained the



## GOLD MEDAL

(HIGHEST AWARD)

AT THE

PARIS EXHIBITION, 1889.

PRICE LIST ON APPLICATION.

JOHN MORGAN RICHARDS,

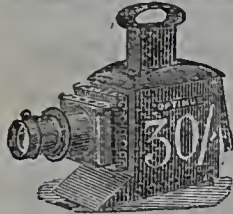
SOLE AGENT.



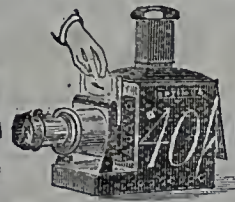
# 'OPTIMUS'

## MAGIC LANTERNS.

Each Magic Lantern is efficient for exhibitions. The lens gives crisp definition, being a superior Achromatic Photographic Combination (large diameter back lens), with rack and pinion. It is fitted to a telescopic lengthening tube, so gaining increased focal accommodation. The Condenser is composed of two plano-convex lenses of 4 inches diameter. The refrugent lamp has 3 wicks (or 4 wicks 2s. extra), yielding a brilliantly illuminated picture. Each is complete in box. Adapted for use with Limelight. For Dissolving Two Lanterns are necessary.



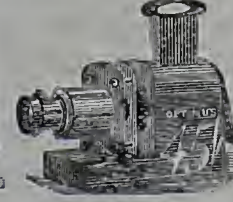
Japanned Metal,  
30s.



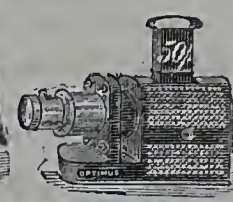
Students' Lantern (to take  
demonstrating tank) with  
finished Brass Sliding  
Tubes, 40s.



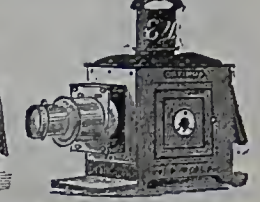
Mahogany outside  
Body, Japanned  
Metal Stages and  
Sliding Tubes, 42s.



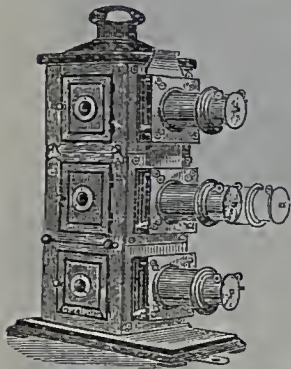
Russian Iron Body,  
Brass Sliding Tubes,  
45s.



Perforated Russian  
Iron Body,  
Brass Sliding Tubes,  
50s.



Mahogany outside Body,  
2-panelled Door, Brass  
Stages, Sliding Tubes,  
82s.



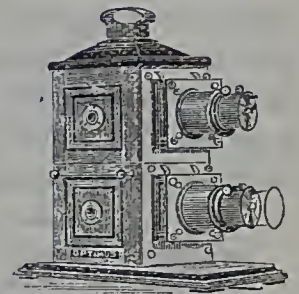
### 'OPTIMUS' BI-UNIAL LANTERN.

For  
Lime Light.

The Top Lantern may be used separately with Oil Lamp.

Panelled Mahogany Body and Moulded Foot, picked out with black,  
Japanned Stages and Tubes, Achromatic Photographic Front  
Lenses, Compound Condensers .. .. . £5 12 0  
Ditto ditto with brass stages and sliding tubes .. .. . 8 8 0

If fitted with 3-draw Telescopic Tubes, and 4 Front Lenses, £6 6s.  
Two Gas Jets, 22s.; Dissolving Tap, 17s.



### 'OPTIMUS' TRIPLE LANTERN.

For  
Lime Light.

Panelled Mahogany Body, Moulded Foot, picked out with black,  
Brass Stages and Tubes, Achromatic Front Lenses, Compound  
Condensers .. .. . £14 10 0

If fitted with 3-draw Telescopic Tubes, and 6 Front Lenses, £8 8s.  
Three Gas Jets, 33s.; Patent Triple Dissolving Tap, 33s.

**PERKEN, SON & RAYMENT,**

99 HATTON GARDEN,  
LONDON.

**"OPTIMUS."**

## BOTWRIGHT & GREY

(Late A. H. BOTWRIGHT. Established 1865),

MANUFACTURING OPTICIANS, Wholesale and for Exportation only, 13 SPENCER ST., CLERKENWELL, E.C.

SPECTACLES

AND

EYEGLASSES

Of every description.



FIELD, OPERA,

AND

MARINE GLASSES,  
TELESCOPES, &c.

**MASON'S IMPROVED OPTOMETER** (Registered), 17s. 6s. each nett.

Great saving of time by testing defective sight with this instrument. Sketch on application.

Specialities in Clinical Thermometers with indestructible indexes—half minute and lens front, &c.

OPHTHALMIC SURGEONS AND HOSPITAL PRESCRIPTIONS ACCURATELY PREPARED.

PATENTS, DESIGNS,

# TRADE - MARKS.

**BERNHARD DUKES,**

226 High Holborn,  
LONDON, W.C.

Undertakes all business relating to  
PATENTS DESIGNS AND TRADE-MARKS.

PLEASE MENTION THIS PAPER WHEN APPLYING.

Telegraphic Address:—

"APPLICANT LONDON"

ATTENDANCE IN THE PROVINCES.



SEND FOR SAMPLES.

High-class Artistic

**HANDBILLS**

SEND FOR SAMPLES  
OF LABELS.

FOR CLEANING PLATE

**BRADLEY & BOURDAS'S**  
**ALBATUM or WHITE ROUGE,**  
For Cleaning Gold, Silver, and Plated Goods.

Since its introduction as a substitute for the ordinary Rouge, a quarter of a century ago, the sale has amazingly increased both at home and abroad. A trial is only needed to prove its superiority over other plate powders in use. Sold in Boxes at 1s. and 2s.; Tins, 6s. 6 Pont Street, Belgrave Square, and 48 Belgrave Road, London, S.W.







# To the Export Trade.

WE extend special facilities to all the Foreign Wholesale Houses who handle our goods. We prepare a "Vinolia" for Export, put up with direct regard to the exigencies of hot climates, transportation, &c. To avoid mistakes, all "Vinolia" which is designed for foreign trade is stamped with the words "**for Export only.**" Unless the Wholesale Houses bear this in mind, "Vinolia," as ordinarily put up, may be sent out, with consequent disappointment and dissatisfaction.

In order to give Foreign Houses every encouragement and facility to push our goods, and always keep a goodly amount on hand, we undertake to supply "Vinolia" preparations in any quantity whatever to the Foreign Trade **at Special Terms.**

We are now spending considerable sums of money in advertising in foreign countries with very satisfactory results, both to the trade and ourselves, and an ever-growing demand for our goods. We would therefore suggest to all the Foreign Houses that they look to it that their supply of "Vinolia" preparations does not run low, as those who always have them on hand will be most likely to reap the largest share of the returns. Our experience has been that those who have our preparations first do the best in them.

All the leading houses in this country have had as much pleasure and profit out of handling "Vinolia," "Vinolia" Powder, and "Vinolia" Soap, as out of any of the products introduced in recent times, as they are the embodiment of the highest perfection in Pharmaceutical Art. Warmest expressions of admiration, favour, and good report reach us daily from both Medical Men and the Trade. It seems only reasonable for us to promise that as our products have been found so satisfactory and generally profitable to the trade in this country, they will prove likewise if taken up with interest abroad.

We are always desirous to co-operate with the trade in every possible way. With this regard we supply most artistic and costly show cards, and literature of the highest class it is possible for us to produce. Our pamphlets are all issued in a unique form, and their execution alone, to say nothing of their superior body matter, is most creditable to those distributing them. Literature can always be obtained from us in any quantities desired.

Our goods are handled by all the prominent houses of foreign countries, among whom may be mentioned the following firms:—

FELTON, GRIMWADE & CO., Melbourne.  
ROCKE, TOMPSITT & CO., Melbourne.  
ELLIOTT BROS., LIM., Brisbane and Sydney.  
THE NEW ZEALAND DRUG CO., Dunedin,  
Christchurch, Wellington, and Auckland.  
SHARLAND & CO., New Zealand.  
LENNON & CO., Port Elizabeth, South  
Africa.

KUNTZEN & CO., Brazil.  
H. NATHAN & CO., Australia.  
ROBERTS & CO., Rue de la Paix, Paris.  
KEMP & CO., Bombay.  
BATHGATE & CO., Calcutta.  
EVANS, LESCHER & WEBB, Spain.  
CASWELL, MASSEY & CO., New York.  
NEIL S. CAMPBELL & CO., Colombo, Ceylon.

*Prices:—*"VINOLIA," 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" POWDER, 1s. 9d., 3s. 6d., and 6s. per Box; "VINOLIA" TOILET SOAP, 2s. 6d. per Box of Three Tablets; "VINOLIA" MEDICAL SOAP, 2s. per Box of Three Tablets; "VINOLIA" SHAVING SOAP, 2s. and 3s. 6d. per stick.

**BLONDEAU & CIE., London, Paris, and New York.**

English Dépôt—Ryland Road, London, N.W.



# EXCHANGE COLUMN.

This section of "The Chemist and Druggist" must be closed for press by Thursday noon of each week.  
Remittances payable to EDWARD HALSE.

## TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.," and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin & Co."

## FOR DISPOSAL

### Educational.

Southall's Herbarium, 5s. 9d.; Will's Cabinet, 4s. 6d.; both perfect. 275/37.

### Literature.

"Wild Flowers," Pratt's, two volumes, perfectly new, 7s. 6d. Dring, 16 Westgate Street, Ipswich.

### Soda-water Machinery.

Soda-water plant, complete, second-hand, 21l. Particulars, N. S. G. Wilcocks, 45 Avon Street, Bath.

### Proprietary Articles.

Veterinary embrocation.—100 2s. Jacob's lime embrocation; what offers? Knott's, Ashbrook Road, Upper Holloway.

### Drugs and Chemicals.

Splendid gum arabic 1s. lb.; send stamp for sample. Lakeman, Chemist, Leytonstone.  
Poppy heads, 4s. 6d. 1,000; bag 3d.; sample 3d.; small for crushing, 1d. lb.; bags 3d. Connor, Chemist, Doncaster.

### Formule.

Reliable recipes, 6d. each; full set of 130 neatly copied in book, 7s. 6d.; send for list. "Chemist," Edwards, Wye, Kent.

Brooks's Formulae.—Good business may be done with the following:—"Balm of Glycerine and Liquorice"—certain cure for coughs; "Quinine and Iron Tonic"—bright and unchangeable, not unpleasant taste; most useful general Tonic; "Glycerine Cream"—Perfection of toilet requisites, quickly cures chapped hands, frost bites, roughness, cracks, tender feet, and prevents chilblains; "Corn Cure"—Salicylic and iodine, does not readily dry up; answers when other so-called cures fail; "White Oils"—inseparable, milk white, creamy; no better ever offered; costs under 10d. lb. Recipes, 7d. each; six for 2s. 8d., with full instructions for making, &c., post free; list 400 recipes rec. T. Brooks, Chemist, Hornsey, N.

### Shop Fittings.

Maw's brass wire, upright sponge case, four compartments, cost 32s., good condition; what offers? 9/8.

Handsome open window screen; mahogany dispensing screen, very low price. Sangster, Hampstead.

Counter case, bent glass, 6 feet long; nests of drawers, desks, dispensing screens, counters, shop rounds and entire fittings of a chemist's shop for sale, together or separate; great bargains. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

Special opportunity.—Shop-rounds, new hand-made, English, stoppering warranted, 10 oz., 4s. 6d.; 20 oz., 5s. 9d.; 32 oz., 7s.; 40 oz., 8s. per dozen, wide or narrow mouth; gold-labelling, best style, any names, 2s. 6d. per dozen extra; shop jars, dome or canopy, very cheap; pill machines, best quality, 5-grain, for 24, 15s. 6d.; also shop fittings, bargain; state wants. "Drug," 83 Campbell Road, Stoke-on-Trent.

1 31-in. specie jar, total height, scroll label, ornamental glass cover, 1l. 15s.; 2 23-in. specie jars, Royal arms, ornamental metal covers, and mahogany plinths, 4l.; 4 16½-in. high ditto, ornamental ecroll labels, flat japanned covers, each 7s.; 1 30-in. ditto, Royal arms, glass gilt cover, 2l. 17s. 6d.; 1 30-in. ditto, phoenix, glass gilt cover, 2l. 5s.; 1 16-gall. carboy, cut stopper, 1l. 15s.; 1 12-gall. ditto, 1l. 5s.; 17 1-gall. green carboys, gold labels, large japanned caps, stoppered, 4 3-quart ditto, 1l. 10s.; several nests of drawers. W. Hawke & Son, Shop Fitters, Wild Court, Great Wild St., London.

Clearance sale, bargains.—750 second-hand shop rounds, 6s. doz.; 100 black stock bottles, 6s. doz.; 1,000 blue syrup bottles, plug stoppers, quite new, 8s. doz.; 15 1 and 2 gall. cylindrical carboys, cut stoppers, 2s. 6d. each; 10 pear-shape 3s. 6d. each, 3 gall. 7s. swan-neck 25s.; 20 specie jars from 7s. 6d. to 50s. each; mortars and pestles from 1s.; tripod scales and weights, 5s.; metal frame show case, 4 ft., 25s.; mahogany dispensing screen with plate glass tablet, 7 ft., 35s.; pill machines from 7s. 6d. each; also a large stock of drawers, counters, back fittings, and a variety of other useful shop fittings and utensils equally cheap, together or separate. Natali & Co, 184 Aldersgate Street, nearly opposite Maw's. Established 1863.

### Miscellaneous.

One dish and five basins for practical chemistry; half price. Royac, Stockport.

5-grain pill-machine, 24, perfect condition, 10s. 6d. K., 4 Newstead Grove, Nottingham.

A pair of stones (16 in. across), that will grind fenugreek or any seeds; price 5l. on rail. Apply, T., 6 Hartington Street, Derby.

What offers for Pears' "Dirty Boy"? in perfect condition. J. Crosby Robson, Middlesborough.

Worth notice.—Little Turkey sponges, soft as velvet; finest quality for bathing wounds, eyes, &c., 1s. doz., 3 doz. 2s. 6d., post free. T. Brooks, Chemist, Hornsey, N.

Beeswax, pure English, good colour, 1s. 7d.; 3 doz. 2s. 9d. Holden's vinum vitæ, 36s.; 32 gum bougies, Maw's cylindrical, 16s.; 18 catheters ditto, 6s. Brampton, Sudbury, Suffolk.

A most effective advertisement—concave and convex mirrors in frame, 21 by 14 inches, marked "Before Taking," "After Taking"; price complete, 30s. Beck, Chemist, Hastings.

Microscopic objects, gorgeous polarising, brilliant opaque and entertaining slides, 3 by 1, suitable for evening exhibition, 5s. dozen, list free; 4 dozen slides sent, carefully packed and postage paid, for 21s., to Australian Colonies, Belgium, Canada, France, Germany, India, New Zealand, South Africa; microscope accessories wanted in exchange. Henry Ebbage, 344 Caledonian Road, London.

## WANTED.

Sequah's oil and medicine, and saleable patents. 9/17.

A large size (Barringtons') drug mill. Cavells, Chemist, Whittleson.

Tincture-press, fair size, good condition. J. B. Harris, Southmolton.

Bougie-mould; state lowest cash price and condition. Grant, Chemist, Clevedon.

Shop fittings, show cases, utensils, &c. Natali, 184 Aldersgate Street, E.C.

A chemist's lamp, as fig. 8, 10, or 11 Maw's list; must be perfect. Apply by letter to J. F. E., 37 Walbrook, E.C.

Dental chair.—Secondhand; must be cheap; state particulars and price. A. G. Trow, 7 Ladypool Road, Sparkbrook, Birmingham.

Nest of large drawers, deal, about 7 feet long by 30 or 36 inches deep, cheap; 2-gall. tincture-press, as Maw's. Tomlin, Barnsley.

Beecham's pills, 4s. 6d. Collis Browne's chlorodyne, Sequah, and any saleable patents. Birkbeck, Chemist, Lincoln.

Bottles, drawers, and accessories of trade for country branch. Walden, Chemist, Ramsey Man.

Attfield's "Chemistry," Bentley's "Botany," latest editions: state price. Tyack, Great Marlow, Bucks.

Back numbers of *Chemist and Druggist* for February 15, March 14, and July 15, 1885. Maddock, Palsborough.

*The Chemist and Druggist* for 1883, complete, with index; also April, 1877. Send price to The Publisher, 42 Cannon Street, E.C.

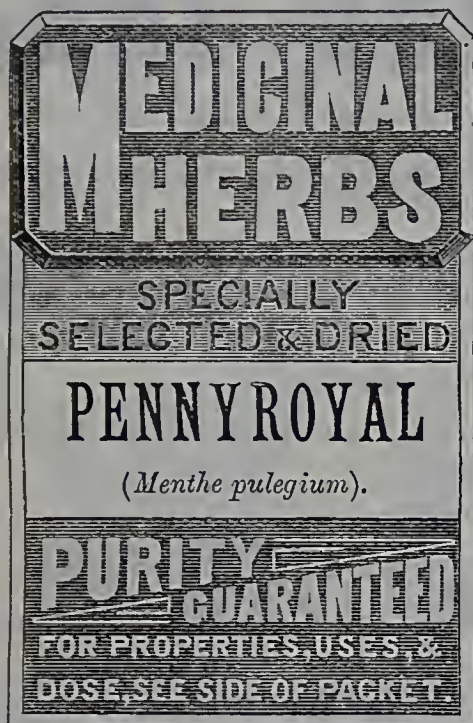
Two second-hand dispensing screens, 8 feet and 6 feet, good condition and cheap. Full particulars, early, to 226 Roebdale Road, Oldham.

### Address Wanted.

10s. will be given for the correct present address of W. H. Barton, late chemist, 8 St. Peter's Street, Derby. W. Kemp & Son, Newcastle.



# MEDICINAL HERBS, IN PACKETS.



Registered Trade Mark

ALL KINDS,

**7/-**

PER GROSS.

In 3 and 6 dozen Boxes,  
assorted to order.

Full particulars given with every Packet as to the properties and uses of each Herb.

A Special Pamphlet, entitled "POPULAR HERBAL REMEDIES," is now issued with these Packets, giving full particulars as to the uses of each remedy, and supplying a copious index to diseases.

## FLOWER SEEDS,

IN PENNY PACKETS.

These Seeds are Packed in Coloured Pictorial Packets, and may be had in Two-Gross Cases or Mounted on Half-Gross Cards.

Price 6/- per gross.

Price Current, with full list, on application.



# POTTER & CLARKE,

WHOLESALE AND EXPORT BOTANIC DRUGGISTS,

5, 6, & 7 RAVEN ROW, Artillery Lane, LONDON, E.



PATRONISED BY HER MAJESTY.

# BARBER'S ORIGINAL CRIMSON MARKING INK,

WHICH IS CHANGED BY HEAT TO A JET BLACK.



Put up for Retail Sale in 6d., 1s., 2s., 2s. 6d., and 5s. Bottles

ALSO

## BARBER'S CONCENTRATED LIQUID COCHINEAL

FOR COLOURING JELLIES CUSTARDS, ETC.

Put up in 6d. and 1s. Bottles.

ALSO BARBER'S ARTIFICIAL IVORY FOR FILLING DECAYED TEETH,  
1/- per Packet.

MANUFACTURED ONLY BY THE PROPRIETORS—

## G. BARBER & CO., CLUB MOOR, LIVERPOOL.

Can be obtained through any of the Wholesale Firms in Great Britain, or from FELTON, GRIMWADE & CO., Melbourne; ELLIOT BROS., Sydney and Brisbane; KEMP THORNE, PROSSER & CO., Dunedin and Auckland; FELTON, GRIMWADE & CO., Wellington; or direct from the Manufacturers—G. BARBER & CO., Club Moor, Liverpool, England.

# BARCLAY & SONS, LIMITED

ESTABLISHED



OVER A CENTURY.

## PATENT MEDICINE DEALERS AND PROPRIETORS.

## DRUGGISTS' SUNDRIES & SURGICAL INSTRUMENTS

MANUFACTURERS AND DEALERS.

EXPORT ORDERS Carefully and Promptly Executed on the most Favourable Terms.

QUOTATIONS FURNISHED.

AGENCIES UNDERTAKEN.

SHOW ROOM AND WAREHOUSES—

## 95 FARRINGDON STREET, LONDON.



# "MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 lb. Tins only.



## TADDY & CO., 45 Minories, LONDON



ESTABLISHED 150 YEARS,

### SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.

## JOHN OWEN, JUNIOR,

PACKING CASE MANUFACTORY AND STEAM SAW MILLS.

ESTABLISHED 1840.

37 & 38 MINORIES, LONDON, E.C.

MANUFACTURER OF

Cases of every description for Home use and Exportation.

Wine Laths, Oak and Deal.

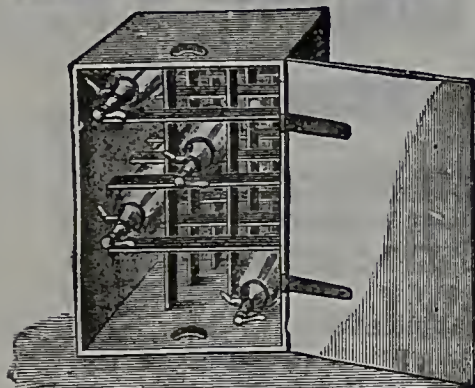
Mineral Water Bin Cases and Trays.

Bottle Crates, Straw Envelopes.

Cases Lined with Tin, Zinc, Copper, &c.;

ALSO MANUFACTURERS OF THE

"Acme" Incubator & Poultry Appliances.



PRICE LISTS FORWARDED ON APPLICATION.

EXPORT ORDERS RECEIVE SPECIAL ATTENTION.

## WILKINSON'S COMPRESSED

Best Hops compressed into small parcels of one pound and half-pound, and sent out in cases containing 30 lbs. each. These hops are specially selected and compressed for keeping purposes, and will retain their aromatic strength for a considerable time.

They are introduced to the public to enable them to make their own HOP BITTERS, YEAST, HOME BREWING, and numerous other purposes. Full particulars given in each packet.

Samples and Prices sent on application to

## ENGLISH HOPS.

A. WILKINSON & SONS, 37 CANNING PLACE, LIVERPOOL.

P.S.—Chemists will naturally see the great advantage in making their own Bitters from the Pure Hop itself.

Dealers in every description of Isinglass.

## WM. BUSH, SON & CO.

YORK STREET, WALWORTH, LONDON, S.E. Established over 40 Years.

Wholesale and Export Chemists. Manufacturers of Concentrated Fruit Essences and Flavours of every description. Colour Extracts for Confectionery. Citrate of Magnesia, &c. Importers of Finest Super Essence of Lemon and all Essential Oils, &c.

PRICE LIST AND SAMPLES ON APPLICATION.

TELEGRAPHIC ADDRESS—"BUSHWORTH LONDON."

## EUCALYPTUS OIL, EUCALYPTOL, RED GUM, &c.

MEDICAL, TOILET, & SANITARY SPECIALITIES.

Prepared from Natural Eucalyptus Oil, which is one of the strongest Antiseptics known.

Eucalyptus Disinfectant Fluid and Powder, Extract, Emulsion, Ointment, Spray, Surgical Dressings, &c., &c. Red Gum Lozenges, Tincture, &c.

DR. DAY'S SPECIALITIES.

EUCALYPTOL CREAM, LINIMENT, DENTIFRICE, TOOTH POWDER, HAIR WASH, &c. ALSO DR. DAY'S TONIC APERIENT PILLS.

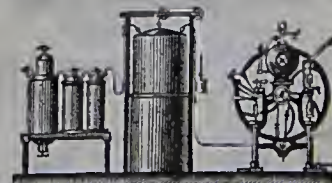
For the USE of the DISINFECTANT in SCARLET FEVER, see BRITISH MEDICAL JOURNAL, October 26 and November 23.

PRICES, &c., ON APPLICATION.

## J. TUCKER & CO.

Wholesale Drug and Medicine Agents,  
51 PADDINGTON ST., LONDON, W.

## AERATED WATER MACHINERY. SYPHONS.



Inc. ment Apparatus ... from £17  
Continuous ... .. £40  
Syphons, first quality ... .. 1s 8d.

WRITE FOR OUR No. 6 TARIFF.

PRUDON & DUBOST, Bd. Voltaire, PARIS.



HIGHEST AWARD AT THE INTERNATIONAL EXHIBITION, LONDON, 1885.  
TRADE MARK Registered May 21st, 1887.

THE PIONEER TEMPERANCE BEVERAGES.—Ch. Eng. Temp. Chron.



# BECKETT'S



## FRUIT SYRUPS & CORDIALS

"First-class beverages."—*The Grocer*.  
 "Have an established reputation."—*Nonconformist*.  
 "That Beckett's Fruit Syrups are equal to what their proprietor claims for them is proved by the fact that they are largely used in Coffee Houses throughout the country."—*Coffee Public House News*.

Analytical Reports from GRANVILLE H. SHARP, Esq., F.C.S.; G. BOSTOCK, Esq., F.O.S.  
 Ice Lists, Testimonials, and other information sent post free on application to the Manufacturer—W. BECKETT, Heywood, Manchester

"Delicious beverages."—*Scottish Good Templar*.  
 "Beckett's Fruit Syrups are not to be excelled."—*Anti-Adulteration*.  
 "All Mr. Beckett's preparations are most tastefully bottled and labelled, and their bright appearance makes them ornamental to the shelves of the Confectioner and Temperance Hotel-keeper."—*Good Templar Watchword*. [Review]

**MILD DRINKS.**  
 Cherry. Raspberry.  
 Strawberry. Lime Fruit  
 Black Currant. Lemon.  
 Orange. Jargonelle Pear.  
 Pineapple.  
 Raspberry Vinegar.  
 Orange and Quinine.

**HOT DRINKS.**  
 Winterine. Honey Liqueur.  
 Aromatic Black Currant.  
 Gingerette. Ginger Lemon.  
 Peppermint. Orove.  
 Elderberry. Syrup of Hops  
 Lime Fruit Cordial.  
 Raspberry Cordial.

# DOULTON & CO., LAMBETH, LONDON, S.E.

MANUFACTURERS OF EVERY DESCRIPTION OF

## WATER FILTERS.

NEW PATENT

Manganous Carbon FILTERS.  
 Boudoir and Table FILTERS.  
 Pocket and Syphon FILTERS.

House Supply or Cistern FILTERS.  
 Patent Granular Charcoal FILTERS.  
 Refrigerator FILTERS.

## MAIN SERVICE FILTERS

FOR INTERMITTENT OR CONSTANT SUPPLY.

See Reports, Analyses, &amp;c. Detailed Lists on application.

To be obtained of all Dealers.

# DOULTON & CO., LAMBETH, LONDON, S.E.

DEPOTS:—100 Soho Street, LIVERPOOL; Granville Wharf, BIRMINGHAM; and 6 Rue de Paradis, PARIS.



TRADE MARK.

## KANGRA VALLEY INDIAN TEA GROWERS' ASSOCIATION.

French &amp; Langdale, 14 St. Dunstan's Hill, London, E.C.

Guaranteed to be Absolutely Pure, as supplied to Europeans in India.

Packed in 1-lb., ½-lb., and ¼-lb. Metallic Air-tight Packets.

No. 1, Orange Pekoe, at 4/ per lb. No. 2, Pekoe, at 3/ per lb. No. 3, Pekoe  
 Souchong, at 2/6 per lb. No. 4, Souchong, at 2/ per lb.

Expert Prices in Bond, 6d. per lb. less than above, in Chests of 50 lbs. and upwards, shipped free of  
 charge. 50 lbs. Carriage Paid. No Travellers employed. Wholesale Terms and Tasting  
 Samples on application.

These Teas are recommended to Chemists not only on account of their  
 Purity, but because they are Less Astringent than other Indian Teas.

# The Only Gold Medal

For INFANTS' FOOD awarded at the

## PARIS EXHIBITION, 1889,

HAS BEEN CONFERRED UPON

# NESTLE'S FOOD



ESTABLISHMENT OF BOULEVARD VOLTAIRE, 162 & 164, PARIS.

**GOLD  
MEDAL**



AT EXHIBITION,  
1889.

# DURAFORT

PATENTED.

## SYPHONS

OF ALL MODELS.

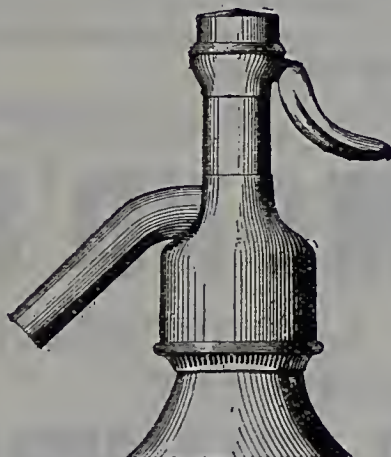
Pure Tin and Glass,  
First Quality.

## APPARATUS

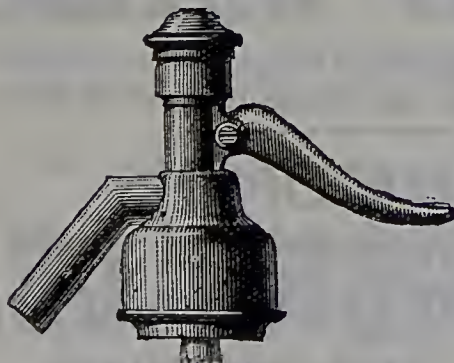
AND

## POWDERS

To Make Seltzer and Vichy  
Waters, &c., &c.



SMALL LEVER.—No. 5.



LARGE LEVER.—No. 10.



SELTZATEUR.

SMALL LEVER.—No. 1.

*New Patent Syphons with TUBES entirely made of CRYSTAL for Lemonade and Potash or Soda Water.*

We beg to call the attention of our numerous customers to the quality of the material employed in the manufacture of our Syphons. In our quality not a particle of lead is employed. The crystal is of the very best quality; each Syphon is guaranteed to be tested before leaving our works.

**SODA WATER MACHINES.**

**FILLING MACHINES.**

*Our General Catalogue and Price List will be sent free on application. Large Discount for Quantities.*



# JEWSBURY & BROWN'S (MANCHESTER) SPARKLING TABLE WATERS, UNRIVALLED FOR PURITY AND QUALITY.

SODA WATER.  
SELTZER WATER.  
POTASH WATER.  
LITHIA WATER.  
SIMPLE  
AERATED WATER.



LEMONADE.  
GINGER ALE.  
QUININE TONIC.  
GINGER BEER.  
HOREHOUND BEER.

## EXTRACTS FROM ANALYTICAL REPORTS.

"The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."

FRANCIS JONES, F.R.S.E., F.C.S.

"On the whole, I have no hesitation in stating that your Aërated Waters are of the highest standard of purity which is practically attainable."

LOUIS SIEBOLD, F.I.C., F.C.S.

J. & B.'s Syphons are mounted with PURE BLOCK TIN, thus ensuring absolute immunity from dangerous metallic contamination.

CARRIAGE PAID AND ON RETURNS.

113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.

## HUGO BROWN & CO.

41 Ormond Street, LIVERPOOL,

SOLE AGENTS IN EUROPE FOR LIEBIG'S

## EXTRACT OF BEEF

MADE BY

MESSRS. A. SANTA MARIA & CO.  
PAYSANDU.

Sold as imported in cases of two tins each, weighing together about 112 lbs.

## CIGARS, ETC.

At the Lowest Wholesale Prices.

La Juana .. ..	10/6 per 100, Sold at 2d. each.
La Trafalgar .. ..	15/0 " " 3d. "
El Sol Habaners,	} 22/ per 100, Sold at 4d. each.
Havannah 1885 Crop	
&c. &c. TOBACCO, CIGARETTES, &c.	

Samples on receipt of 1s. 6d. in Stamps.

## BEWLAY & CO., LTD.

Tobacco Manufacturers and Cigar Importers,

49 STRAND, and at 143 CHEAPSIDE, LONDON.

ESTABLISHED OVER 100 YEARS.

18

## KINMOND'S

Royal Leamington  
APNEUMATIC

## TABLE WATERS

Were first supplied to H.M. the Queen in 1856,  
and to H.R.H. the Prince of Wales in 1862.

## KINMOND'S GINGER ALE,

AND ALL THEIR OTHER WATERS,  
Are UNRIVALLED for PURITY and QUALITY.

In Ordinary Bottles and Syphons.

## MANUFACTORY- LEAMINGTON.

Send for Trade List and Compare Prices.



BY ROYAL LETTERS PATENT.

# HASSALL & CO.'S PHOSPHO-CITRIC ACID

Is the Best, Purest, and most Economical Agent for Acidulating all Saccharine Beverages.

Price only 10d. per lb., in 9 and 18 gallon casks ; 1s. per lb. in small quantities.

One Ounce Measure is equal to One Ounce of Citric. It produces a higher class Beverage, and shows an economy of between £6 and £7 per cwt.

We do not ask for an order, we merely solicit the favour of a trial.

3-oz. Sample for Postage (3 stamps), or 14 lbs. on approbation.

**PAMPHLET GRATIS.**

## UNSOLICITED TESTIMONIALS.

We are pleased to be able to testify that your Phospho-Citric Acid is satisfactory under the most severe trials. We have placed Manufactured goods in which your Acid was used in a refrigerator for months, and also for nine months in a stove in which the temperature stands at ever 150° day and night, and the bottles when examined to-day were as bright as the day they were put in. —, LONDON.

LEMON STREET, ABERDEEN.

I have pleasure in bearing testimony to the fact that first-class waters are produced, with greater body and finer fruity flavour, at half the cost of Citric ; and further that your Acid is free from all traces of LEAD, generally found in the crystals.

I am persuaded that your Acid will ultimately command the Mineral Water Trade.

Yours faithfully, WM. THOMSON.

"And may I also be permitted to add my testimony to the excellence of your Phospho-Citric Acid ; I consider it far and away preferable to Citric." O. H. ORTON, STOKES GOLDING.

## FERMENTATION.

When Fermentation is present, Saccharine Beverages made with this Acid will keep sound and bright several days longer than those made with Crystal Acids.

**HASSALL & CO.**  
**YORK ROAD, KING'S CROSS, LONDON.**

TELEGRAMS:—"REMPUJARON LONDON."



**BRAGG'S**

Undoubtedly the most natural preventative and curative agent in all cases of Indigestion, Disorders of the Liver, Fevers, Cholera,

Dysentery, &c.

The trade cannot do better than keep these old-established and safe preparations under the notice of their customers.

**VEGETABLE  
CHARCOAL.**

SOLE MANUFACTURER—

**J. L. BRAGG, 14 WIGMORE ST., LONDON.**

SHOW CARDS AND COUNTER BILLS ON APPLICATION.



PEPTONATE OF IRON

SOLE MAKERS

PEPTONE OF MEAT

# DENAEVER'S

## LIQUID PEPTONES STERILIZED

Free from microbes!  
Keep good for ever in all climates.  
118 BISHOPSGATE STREET WITHIN, LONDON, E.C.

**DENAEVER'S PEPTONATE OF IRON.** A bland, non-irritating and most easily assimilable ferruginous preparation. For debilitated constitutions, children, and aged people.

**DENAEVER'S PEPTONE OF MEAT.** A powerful restorative for all ailments of the stomach, stimulates general nutrition. Is retained when the stomach rejects all other food. Pleasant to taste.

Of all Chemists and Wholesale Houses.

**BRAND & CO.'S**  
**PEPTONES**  
OF  
**BEEF,**  
**MUTTON,**  
**VEAL,**  
AND  
**CHICKEN.**

To H.R.H. The Prince of Wales, The Empress of Germany, &c.

## BRAND & CO'S.

### SPECIALTIES FOR INVALIDS.

CONCENTRATED  
BEEF TEA, VEAL,  
MUTTON & CHICKEN BROTHS;  
TURTLE SOUP & JELLY, CALF'S FOOT,  
JELLY, MEAT LOZENGES

ESSENCES  
OF BEEF &  
MUTTON  
VEAL  
AND  
CHICKEN

SOLE ADDRESS,  
11 LITTLE STANHOPE STREET, MAYFAIR, W.

# Fry's Pure Cocoa



To secure this article  
ask for

FRY'S PURE  
CONCENTRATED



146 MINORIES, LONDON, E.C.  
New York  
Sydney

**SODA WATER MACHINERY**  
AND ALL ACCESSORIES FOR THE TRADE

**BRATBY & HINCHLIFFE** LIM.

HEAD OFFICE  
SANDFORD ST. ANCOATS, MANCHESTER

BOXES BOTTLES MACHINERY,  
ESSENCES.  
Catalogues, Circulars, Testimonials  
Post Free

# SYPHONS & SELTZOGENES

GREAT REDUCTION IN PRICE.

We have recently been entrusted with a most important Agency for the above-named goods. Our Principals are the best known firm in Paris, and the Syphons are undoubtedly the cheapest and strongest in the market. The tops are made of pure English Tin, guaranteed free from lead. The Seltzogenes are made on the well-known "Fevre" system, and each one is thoroughly tested before being sent out.

WE CAN GIVE TO LARGE AND SMALL BUYERS EXCEPTIONALLY LOW PRICES.  
PLEASE WRITE US AT ONCE FOR PRICES, STATING QUANTITY OF EACH KIND REQUIRED



## SODA-WATER MACHINERY.

MELBOURNE EXHIBITION, 1889, UNPRECEDENTED SUCCESS.

We have obtained at the above Exhibition

## 3 HIGHEST AWARDS POSSIBLE

A feat never accomplished before by any other house supplying requirements for the Aërated Water Trade.

These awards will carry with them **THREE GOLD MEDALS**, which were awarded as follows:—

- 1st—SODA-WATER MACHINERY (Highest Award possible).
- 1st—ESSENTIAL OILS & FRUIT ESSENCES (Highest Award possible).
- 1st—PATENT AND ORDINARY BOTTLES (Highest Award possible).

WRITE FOR NEW ILLUSTRATED CATALOGUE, POST FREE.

## BRATBY & HINCHLIFFE, LIM.

Aerated Water Engineers and Glass Bottle Manufacturers,

SANDFORD ST., ANCOATS, MANCHESTER.

And at 146 MINORIES, LONDON, E.C.



TO THE  
**CHEMISTS & DRUGGISTS**  
OF  
**GREAT BRITAIN.**

TELEGRAPHIC ADDRESS: *St. George's, Middle St.*  
**COLEMAN,** *NORWICH,*  
*December, 1887.*  
**GEORGE'S, NORWICH.**

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

**COLEMAN & CO., LIMITED.**

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.  
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over one thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

**COLEMAN & CO., LIMITED,**

**ST. GEORGE'S NORWICH,**

**AND 3 NEW LONDON STREET, LONDON, E.C.**

**EIGHT PRIZE MEDALS AWARDED**

**GOODALL'S  
HOUSEHOLD  
SPECIALITIES.**

**YORKSHIRE RELISH.**

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

**GOODALL'S BAKING POWDER.**

The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

**GOODALL'S EGG POWDER.**

One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s. 2s. and 5s. Tins.

**GOODALL'S CUSTARD POWDER.**

Delicious Custards without Eggs. In Boxes, 2d. 6d., and 1s. each.

**GOODALL'S BLANCMANGE POWDER**

Delicious Blanmange in a Few Minutes. Boxes, 6d. and 1s. each.

**GOODALL'S QUININE WINE, B.P.**

Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

**GOODALL'S GINGER-BEER POWDER.**

Makes the Best Ginger-Beer. Packets, 3d. and 6d.

**GOODALL'S BRUNSWICK BLACK,**

For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

**GOODALL'S LAVENDER WATER.**

A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

**GOODALL'S PLATE POWDER,**

For Polishing and Cleaning all Metals. Boxes, 6d., 1s. and 2s.

**GOODALL'S JELLY SQUARES,**

Make a Delicious and Nutritious Jelly. In 1-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.  
boxes, 3d. and 6d. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS.

**PATENT MEDICINES  
AND  
DRUGGISTS' SUNDRIES.**

Monthly Price List of Patent Medicines, Druggists' Sundries, &c., will be sent post free on application to

**GOODALL, BACKHOUSE & CO., LEEDS.**



**LIFE'S  
RESTORER.**

**FINEST  
CONSOMMÉ.**

**HIGHEST POSSIBLE  
HONOURS.**

PARIS EXHIBITION, 1889  
FOOD  
AND COOKERY EXHIBITION,  
LONDON, 1889;  
&c., &c., &c., &c., &c.



## LIQUID EXTRACT OF BEST FRESH BEEF.

A happy thought does not alone constitute a perfect invention; simplicity is needed to make it perfect.

"MAGGI" possesses this quality in a degree that renders it as indispensable in the kitchen as salt and pepper.

"MAGGI" is simply liquid EXTRACT OF BEEF, a teaspoonful of which, added to a cup of hot or cold water, makes at once a perfect BEEF TEA, which anyone, sick or well, will relish.

Two tablespoonfuls to a quart of water (adding Vegetables, &c.) will make a better Soup or Potage than hours spent over the fire.

The improvement in the quality of Gravies, Ragouts, Stews, Hashes, Roasts, &c., by the addition of a few drops of "MAGGI," is amazing.

Unlike all other Extracts of Meat, "MAGGI" is most delicious, does not need the addition of salt and pepper, can be used by the most inexperienced, produces as good a Consommé or perfect Clear Soup as any first-class cook can prepare by the most elaborate and expensive means, and keeps good in any climate.

Soup Stock is now rendered unnecessary, as "MAGGI" is better, cheaper, and more nutritious for the sick, convalescent, and healthy.

In 2-oz., 1-lb., & 2-lb. Bottles, of all Grocers and Druggists throughout the world.

Wholesale Agents—E. Lazenby & Son; Samuel Hanson, Son & Barter; W. & D. Harvest; Crosse & Blackwell.

## ROWNTREE'S

The "MEDICAL PRESS AND CIRCULAR":—

"Certainly this preparation is of delicate flavour . . . It is perfectly soluble . . . the small quantity required for the immediate production of a cup of excellent cocoa will ensure for this 'Elect Extract' a favourable reception at the hands of persons of weak digestion, and all who prefer this wholesome beverage to tea and coffee."



The "BRITISH MEDICAL JOURNAL" says:—

"Rowntree's Cocoa Extract is one of the best. Its flavour and aroma are good. Cocoa thus prepared is one of the most digestible articles of food."

YORK, ENGLAND.



## ROBINSON'S LIEBIG'S BEEF WINE.

Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).  
December 15, 1888.

Introduced 1855.)

## ROBINSON'S CONCENTRATED WATERS.

(Introduced 1855.)

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopœia, and free from all Chemical impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 6/ lb.	Aqua Fœniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent., 4/ lb.
" Anisi " 4/ "	" Cassiæ " 4/ "	" Menth. Pip. " 4/ "	" Rosæ " 8/6 "
" Camphoræ " 4/ "	" Flor. Anran. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin. " 10/6 "
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 4 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

From the LANCET, July 15, 1882:—"CONCENTRATED WATERS (Robinson's, Pendleton, Manchester).—Among the samples sent to us we find Aq. Anethi, Anisi, Cinnam. Ver., Rosæ, and some dozen of others. Diluted with forty parts of water they form the ordinary waters of the Pharmacopœia. They are excellent in quality, and will be very useful, especially in country practice. [1]

Wholesale : HEARON & CO., London, and most Provincial Wholesale Druggists. PREPARED BY THE INVENTOR, B. ROBINSON, MANUFACTURING CHEMIST, DISTILLER, AND BREWER OF BRITISH WINES, MANCHESTER.



# Clarke's Newly Designed "Pyramid" Nursery Lamp Food Warmer, with New Registered Panakin.



N.B.—NO ALTERATION IN THE PRICE OF THE OLD PATTERN "PYRAMID" FOOD WARMER.

## CLARKE'S IMPROVED PANAKINS (REGISTERED) FOR USE WITH CLARKE'S "PYRAMID" NURSERY LAMP.

By this invention any liquid food can be poured out, or drunk, without scum or grease passing through the spout, and prevents spilling when poured into a Feeding Bottle, so objectionable with all other Panakins. These Panakins will fit all the old "Pyramid" Nursery Lamps, and can be purchased separately.

WHOLESALE PRICES { No. 1 ... 30/ per dozen. } Cash discount, 5 per cent.  
LAMPS COMPLETE { " 2 ... 33/ " }  
" 3 ... 38/ "

N.B.—Extras.—Porcelain Panakins per dozen, No. 1 ... 8/ ... Lids ... 2/  
" " " " 2 ... 8/ ... " ... 2/  
" " " " 3 ... 9/ ... " ... 3/

Tin Panakins, No. 1, 3/ ... No. 2, 10/ ... No. 3, 12/

Ulear Glasses 14/ ... Roughed, 8/ ... Opaline, 8/ ... Coloured, 8/ ... Ruby, 8/

N.B.—Ask for CLARKE'S PANAKIN, and see that his name and the registered number (Registered 91,241) is on the Panakin, and trade mark "PYRAMID."

Clarke's Patent "PYRAMID" NIGHT LIGHTS are the only Lights suitable for these Lamps.

Sold Retail by all respectable dealers, and Wholesale by the Patentee, S. CLARKE, PYRAMID AND "FAIRY" LIGHT WORKS, CRICKLEWOOD, LONDON, N.W.

London Show Room—31 ELY PLACE, HOLBORN CIRCUS, E.C.

## CLARKE'S ADJUSTABLE BED-TRAY (COUSINS' PATENT)

FOR INFANTS AND INVALIDS,

For use with CLARKE'S "PYRAMID" NURSERY LAMP FOOD WARMER, with his NEW REGISTERED PANAKIN.

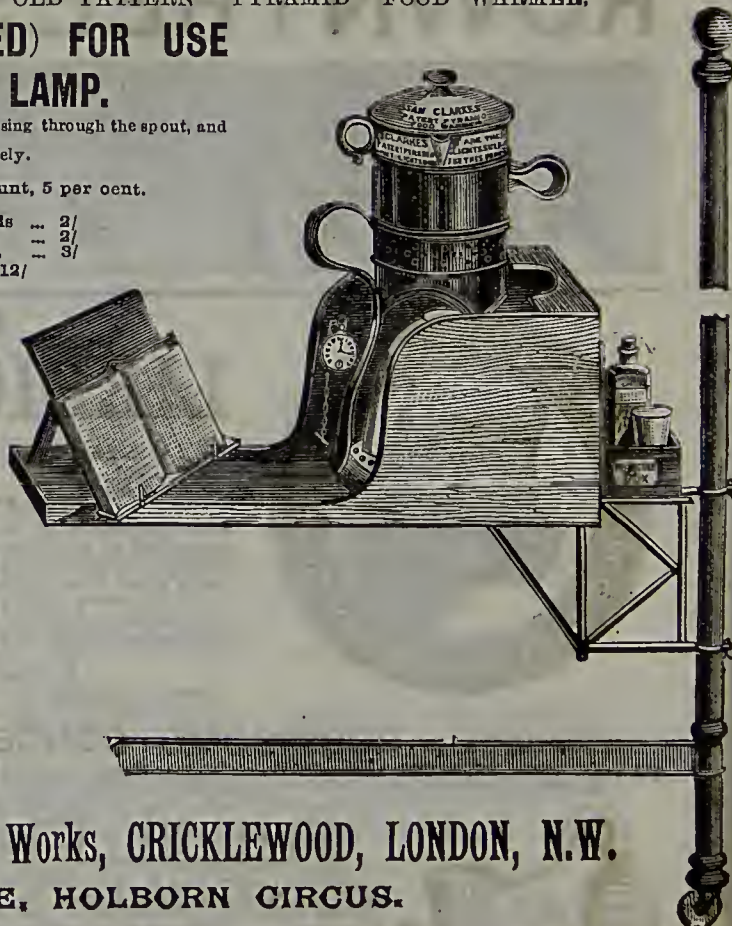
This is an invaluable invention, and useful appliance at the bedside, suitable for Invalids, and particularly for Parents whose Infants require Feeding during the night. It obviates the necessity of getting out of bed, as everything required for use can be put on the TRAY. The Tray is adapted for use in connection with Clarke's "Pyramid" Food Warmer, and when not required can be turned to the wall in such a manner as to Shade the Person in bed from the Rays of the Light.

Invalids will find it a Great Comfort, for any book, plate, basin, &c., can be placed thereon ready for use, and obtained without altering the position in bed. By means of a slide, the Tray can be pulled forward to the position or length required. It is Highly Recommended by the Medical Profession, and can be obtained from most dealers in Clarke's "Pyramid" and "Fairy" Lamps.

Tray, 15/, with Book Rest & Medicine Box, 21/, less 33½ per cent. Food Warmer, see above.

with Brass Bracket, 4s. extra. Adjustable Brass Support for book rest, 5s. extra

RECTIONS FOR FIXING.—Place the Clips round the bed-post, insert the Thumb-screw in the square hole at the end of same, and screw as tightly as possible. The Clips being of spring steel, they will fit any size post. A little cloth or wash-leather should be placed round the bed-post to prevent scratching the post.



SAM'L CLARKE, "Pyramid" and "Fairy" Light Works, CRICKLEWOOD, LONDON, N.W.

SHOW ROOMS—31 ELY PLACE, HOLBORN CIRCUS.



**TYRER'S****MENTHOL**

PEDESTAL.

1d. sizes



BOTTLE.

6s. gross



FIG. A.

**INFLUENZA**

CURED BY

**MENTHOL.**

Dr. LENNOX BROWNE says:—"It kills the microbe of infection."—*Vide* MEDICAL PRESS AND CIRCULAR, January 8, 1890.

2d. Size, as Fig. A, 12s. gross, stained and varnished, all put on  $\frac{1}{4}$ -gross cards with ELASTIC. Sample free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

**S. G. CLEMENTS & CO.'S**

Cake and Liquid

PURE, STRONG,

ESTABLISHED

**ANNATTO**

AND UNIFORM.

1812.

BUTTER COLOURING, IN OIL.

BRISTOL PRIME RENNET &amp; RENNET POWDER

(FOR JUNKETS, &amp;c.).

Prices and terms on application. Special Prices to Buyers of bulk.

Works: 12 Lewins Mead, BRISTOL.

First Honours for Sealing Wax wherever exhibited.

**"LION" BRAND****DISPENSING WAX**

OF BRILLIANT COLOUR.

A Special Series of Six qualities.

Sealing Wax, Parcelling Wax, Bottling Wax,  
Mail and Bag Wax, of great adhesive power,  
and for every purpose.

**GEO. STEWART & CO.**

3 DYERS' BUILDINGS, HOLBORN, E.C.

And all Wholesale Houses. WORKS—EDINBURGH.

**MILLAR'S BRITISH WINES.**

ORANGE (suitable for Quinine), GINGER, RAISIN, COWSLIP, CHERRY, &amp;c.

**A. MILLAR & CO., Thomas Street, DUBLIN.**

Sole Agents for London and District—H. J. ROYDANT &amp; CO., 75 Acre Lane, Brixton, S.W.

**"RAMORNIE." LIEBIG'S Extract of Meat.**

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars..... per lb.	8/9	per doz.	81/0	2-oz. Jars..... per lb.	7/8	per doz.	11/6
1-lb. Jars..... "	7/0	"	42/0	1-oz. Jars..... "	8/4	"	6/8
1-lb. Jars..... "	7/3	"	21/9	1-oz. Jars..... "	8/8	"	3/8

QUOTATIONS FOR EXTRACT IN "BULK" ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage Free.



# W. B. FORDHAM & SONS, LIMITED



## BROOKE'S SOAP.

4d. a Large Bar.

2d. a Small Bar.

USED IN A MILLION HOUSEHOLDS!

Advertised in One Thousand Newspapers!

Wholesale Houses will supply; if difficulty in obtaining in any part of the world, write or wire—

Sole Consignees, "FORDHAMS LONDON."



In Cases of 100 Large Bars, 25/- Free London or Bristol.

In Cases of 60 " " 15/- " " "

In Boxes of 48 Small " 6/3 " " "



SPRING SEASON, 1890.

Of all known Inventions this is the best for Beautifying all Homes, whether in Town or Country.

[COPY OF LETTER]

Aspinall's Enamel Works, London, S.E.,  
31st December, 1889.

Dear Sirs,—I have to acknowledge, with thanks, the receipt of your further order for my Enamel to the value of Five Thousand Pounds, which shall be delivered in due course. I am pleased to note that this last order brings up the value of Enamel ordered by you within the last 5½ months to £10,000 (Ten Thousand Pounds sterling). With regard to the advanced price you are paying me, I assure you it is impossible, in view of the very great increase in price of materials, to continue at the old rates.

Yours faithfully,

H. E. ASPINALL.

Messrs. W. B. Fordham & Sons, Limited.

PRICES IN NO CASE HIGHER THAN THOSE OF THE MANUFACTURER, AND OTHER WHOLESALE HOUSES

HOUSEHOLD NECESSARY.

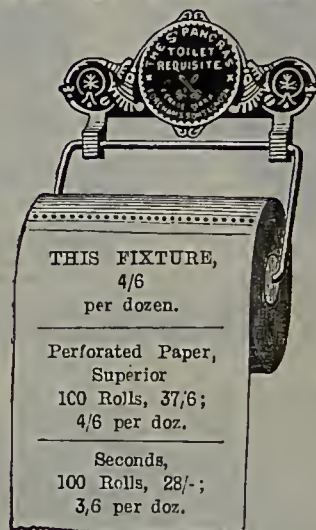


This handsome bronzed Paper Cabinet can be screwed to the wall, or it will stand on the seat or window-sill. Cabinets only, 8/6 per doz.

Paper to refill, in cases of 100 rolls, best quality, 35/-, or 4/3 per doz.

Seconds 28 -; or 3/6 per doz.

TOILET FIXTURE.



THIS FIXTURE,  
4/6  
per dozen.

Perforated Paper,  
Superior  
100 Rolls, 37/6;  
4/6 per doz.

Seconds,  
100 Rolls, 28/-;  
3/6 per doz.

Extra Quality Perforated, cases of 100 rolls, 48/-; per dozen, 5/3.

Extra Super Quality, cases of 100 rolls, 56/-; per dozen, 7/-.

All our Paper is guaranteed 12-oz. Rolls.

## GELATINE

100 Tons of Glue and Gelatines in stock.  
Samples at any prices free by post.

AMERICAN DIAMOND DYES.



Threepenny size . . . . . 21/- gross.  
Sixpenny size . . . . . 40/- "

36 to 40 YORK ROAD, KING'S CROSS, LONDON, N.



Telephone Number, 1852.

Telegraphic Address—CHEMICUS LONDON.

# ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS

## ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

**NOTE.**—The Folios shown in this Index are those at the FOOT of the Page, and not at the Top. This arrangement is necessary in order to meet the requirements of the Post Office.

Foot of page	Foot of page	Foot of page	Foot of page
Allen & Hanburys ..... Cover	Colthurst & Harding..... 49	Kangra Valley Indian Tea Growers' Association..... 16	Reob, H. .... 72
Alofas Company ..... 72	Cook, E., & Co. .... 32	Kay Bros. (Lim.)..... 57	Richards, J. M. .... 8
Anderston's Apothecaries' Hall 56	Corsan, J. R. .... 7	Keeno & Ashwell ..... 76	Roberts & Co. .... 58
Anglo-American Oil Co. (Lim.) 71	Coward, G. F., & Co. .... 56	Kent, G. B., & Sons ..... 62	Robinson & Sons ..... 61
Apollinaris Co. (Lim.)..... Cover	Crouh, F. E. .... 56	Kerfoot, T. .... 10	Robinson, B. .... 23
Armbricht, Nelson & Co. .... 53	Darton, E., & Co. .... 6	Kimmond & Co. .... 18	Rookledge, J. .... 68
Atkinson & Barker ..... 54	Davenport, J. T. .... 51	Knight & Co. .... 68	Rowland, L. .... 73
Attwood, A., & Co. .... 62	Dee Oil Co. (Lim.) ..... 30	Leath & Ross ..... 3	Rowntree & Co. .... 23
Australian Meat Co. .... 25	Denaeyer's Peptone Co. .... 20	Levermore, Aug., & Co. .... 72	Sainsbury, S. .... 72
Ayrton & Saunders ..... 33	Denoual, J. .... 56	Lofthons & Saltmer..... 55	Sanders, H. G., & Son ..... 34
Baelz, R., & Co. .... 55	Doulton & Co. .... 16	London Homoeopathic Hospital and Medical School..... 7	Sanford & Son ..... 72
Baker, W., & Son ..... Text 258	Downie, B. I. P., Co. .... 10	Lorimer & Co. .... 50	Sanitas Company (Lim.) Text 252
Bailey, M., & Co. .... 34	Dukes, B. .... 9	Lüneberger Wax Bleaching Works ..... 73	Schutze, F., & Co. .... 61
Bailey, W. H., & Son ..... 38	Dunnoan, Flockhart & Co. .... 55	Lynch & Co. .... Cover	Seabury & Johnson ..... 73
Barber, G., & Co. .... 14	Durrafort, M. .... 17	Maggi ..... 23	Sharland & Co. .... 58
Barclay & Sons (Lim.) ..... 14	Durrant, G., & Co. .... 72	Mann, C. A., & Co. .... 37	Shirley, A. W. .... 35
Barker, W., & Son ..... Text 258	Eades' Gout Pills ..... 56	Martindale, W. .... 52	Silicated Carbon Filter Co. Text 258
Barrett, R. H. .... 66	Easchman, Bros. & Walsh ..... 60	Mather, W. .... 59	Silverlock, H. .... 5
Barron, Harveys & Co. .... 57	Edwards & Co. .... 32	May & Baker ..... Cover	Smith, Stephen, & Co. .... 70
Beckett, W. .... 18	Elliman, Sons & Co. .... Text 258	May, Roberts & Co. .... 54	Soden Mineral Produce Co. (Lim.)..... 10
Bentley, E., & Sons ..... 60	Ewen & Sons ..... 30	Mère de Chantilly, P. .... 69	Steedman, J. .... 32
Betts & Co. .... 34	Exohange Column ..... 12	Mestivier & Co. .... 72	Stern, G. & G. .... 4
Bewley & Co. .... 18	Farina, J. M. .... 36	Millar, A., & Co. .... 25	Stewart, G., & Co. .... 25
Bewley & Draper (Lim.) ..... 40	Fentiman & Co. .... 72	Miscellaneous Advertisements Coloured Supplement	Stokes, G. R., & Co. .... 62
Beyer Frères ..... 63	Fink, F., & Co. .... 72	Moller, P. .... 56	Sutton, F., & Co. .... 68
Bizet, T. .... 68	Fletcher Bros. & Co. .... 73	Morris & Callard ..... 41	Sutton, Oscar, & Co. .... 30
Billault, M. .... 58	Fletcher, Fletcher & Stevenson Text 258	Mottershead & Co. .... 49	Symes & Co. .... 44
Blondeau & Cie. .... 11	Ford, Shapland & Co. .... 6	Mouilla Soap Co. .... 72	Taddy & Co. .... 15
Boissy ..... 72	Fordham, W. B., & Sons (Lim.) 26	Mumford, G. S. .... Text 258	Taylor, J. N. .... 73
Botwright & Grey ..... 9	Fongera, E., & Co. .... 69	Murray, Sir James, & Son .... 48	Thompson & Capper ..... 50
Bowdlear, W. H., & Co. .... 64	French Nickel Manufacturing Company ..... 56	Natal Drug Co. (Lim.) ..... 53	Thompson, M. F. .... 80
Bowers Bros. .... 7	Frere, L. .... 49	Nestlé, H. .... 16	Toogood, W. .... 65
Bowley, S., & Son ..... 70	Fry & Son ..... 20	Newsome, C. .... 60	Towle, A. P., & Son ..... 46
Bradley & Bonrdas ..... 9	Fuerst Bros ..... 44	North Medicine Co. .... 53	Towle, E. T. .... 54
Bragg, J. L. .... 20	Gibson, R., & Sons ..... 6	Oppenheimer Bros. & Co. .... 55	Townsend, J. .... 9
Braggi, P., & Co. .... 69	Godfrey & Cooke ..... 38	Orridge & Co. .... Supplement	Treat, R. C. .... 32
Brand & Co. .... 20	Goodall, Backhouse & Co. .... 22	Owen, J., Jr. .... 15	Treble, G., & Co. .... 66
Bratby & Hinchliffe ..... 21	Griffiths, T. M. .... 62	Parmenter, I. W., & Co. (Lim.) 67	Treftt, H. P. (Lim.) ..... 30
Brett, F. J. .... Supplement	Half-Price Closed Letter Co. .... 7	Pearls' Soap ..... 41	Tucker, J., & Co. .... 15
Brown, Hngo, & Co. .... 18	Hamilton & Co. .... 52	Penny Quinine ..... 54	Tyrer, P. .... 25
Brunner, Mond & Co. (Lim.) .. 43	Hargreaves, Dr., M. K. .... 7	Perken, Son & Rayment ..... 9	Vaccine Association ..... 73
Burgoyne, Burbridges & Co. .... 42	Hassall & Co. .... 19	Phillips, G., & Co. .... 70	Vogt, G., & Co. .... 31
Burroughs, James ..... 70	Haynes, G., & Co. .... 72	Pollard, A. W. .... 7	Walker, Troks & Co. .... 69
Burroughs, Wellcome & Co 5, 32, 40	Haywood, J. H. .... 61	Pomies, Dr. E. .... 60	Warner, W. R., & Co. .... 29
Bush, W., Son & Co. .... 15	Hewlett, C. J., & Son ..... 46	Potter & Clarke ..... 13	Watson & Wates ..... 73
Cadbury Bros. .... Cover	Hodgkinson, Treacher & Clarke 52	Prudon & Dubost ..... 15	Wedgwood, J., & Sons ..... 65
Carter, J. H. .... 63	Hooper, B., & Co. .... 48	Quelch, H. C. .... 60	Werner & Pfeleider ..... 63
Central School of Chemistry and Pharmacy ..... 7	Hop Bitters Co. (Lim.) ..... 52	Quilliam, J., & Co. .... 72	White, A., & Son ..... 57
Chalmers, W. B. .... 64	Hopgood & Co. .... 32	Radam's, Wm., Mc'coe Killer Co. (Lim.)..... 10	Wilkinson, A., & Sons ..... 15
Chesebrough, The, Co. .... 40	Horn & Son ..... 72	Randall & Sons ..... 10	Willows, Francis & Butler... 57
City School of Chemistry and Pharmacy ..... 7	Hyde, Nash & Co. .... 72	Rankin, William, & Sons..... 64	Wilson, A. .... 50
Clark, S., & Co. .... 63	Ingram, J. G., & Son ..... 74		Wood, Vincent ..... 69
Clarke, Samuel ..... 24	Isaacs & Co. .... 62		Wright, C., & Co. .... 31
Clandon, G. .... 44	Jewsbury & Brown..... 18		Wright, Layman & Umney Text 258
Clements, S. G., & Co. .... 25	Jeyes' Sanitary Compounds Co. Text 258		Wyleys & Co. .... 47
Cockin, J. T. .... 38	Jones & Co. .... 70		Youldon, E. .... 66
Cockman & Co. .... 22			Zimmermann, A. & M. .... 45

## CLASSIFIED LIST OF ALL ADVERTISERS

### APOLLINARIS & MINERALS

Apollinaris (Hungarian)  
Aperient Water, Diamond  
Mark, Friedrichshall  
Apollinaris)  
Barnett and Foster  
Chemists' Astringent Waters  
Association.  
Ellis (Bathin)  
Hassall and Co. (Citric Acid  
Phosphol)  
Hay, W.  
Idris and Co.  
Jewsbury and Brown  
Kinmond and Co.  
Levico Springs Co. (Limited)  
Mills and Co. (Bourne)  
Taylor, T. and F. J.  
[See GINGER ALE.]

### DITTO PLANT

[See SYMPHONS and ESSENCE.]  
Barnett and Foster  
Bratby and Hinchliffe (Ld.)  
Egrot  
Favarger and Co.  
Fevre, T.  
Gueret Frères  
Prudon and Dubost  
Tyler, Hayward, and Co.

### ACETIC ACID

Dunn and Co.  
Fuerst Bros.  
Morris and Callard (Salts)

### ALKALOIDS

Howards and Sons (Cinchona),  
Smith, T. and H. & Co.

### AGENCIES ABROAD

Acad, Ed.  
Australian Drug Co.  
Boissy  
Cooking and Co. (Japan)  
Felton, Grimwade and Co.  
(Melbourne)  
Fongera and Co. (New York)  
Kempthorne, Prosser & Co. N.Z.  
Lennon, B. G., & Co.  
Levy, Jules  
Natal Drug Co. (Limited)  
Peake, Allen and Co.  
Prosser, Taylor and Co.  
Roh, E. O., Co.  
Roberts (Paris, &c.)  
Rooke, Tompsett and Co. (Mel-  
bourne)  
Sharland and Co.  
Soul, W. H., and Co.

### AMMONIA

May and Baker.  
White, A., and Sons  
Woolley, Sons and Co.

### APPARATUS

Clarke, S. (Food Warming and  
Bed Tray)  
Egrot  
French Nickel Mann not ring  
Co.  
Orme (Scientific)  
Perken, Son and Rayment  
Tebbutt, F.  
Wedgwood & Sons (Mortars)

### BANDAGES

Bailey, W. H., and Son  
Robinson and Sons  
Seabury and Johnson

### BAKING POWDER

Dunn, W. G., and Co.  
Goodall, Backhouse & Co.

### BEESWAX

Bowdlear, W. H., and Co.  
Lüneberger Wax Bleaching  
Works

### BICARB. SODA

Brunner, Mond and Co., Lim.  
Howards and Sons  
May and Baker

### BISMUTH, PREP.

Hearon, Squire and Francis  
Hewlett and Sons  
Howards and Sons  
May and Baker  
Symes and Co.  
White, Alfred, and Sons

### BLOOD MIXTURE

Lincoln and Midland Counties  
Drug Co.

### BOOKS

Churchill, J. and A.  
Hargreaves, Dr.  
Mutor, Dr.

### SOTANIO BEER

Newhall and Mason

### BRUSHES

Dukas and Co.  
Fordham, W. B., and Sons  
(Lim.)  
Kent, G. R., and Sons  
Moseler David and Sons

### BOTTLE CAPPING

Teach, J., and Sons

### BOTTLES

Aire and Calder Bottle Co. (Ld.)  
Barnett and Foster  
Barrett, R. H.  
Bratby and Hinchliffe (Ld.)  
Brett's (Lim.)  
Evans, Sons and Co.  
Gilbertson, H., and Sons  
Hearn, E. A., and Co.  
Isaac and Co.  
Kilner Bros.  
Mellin, O. (Stoppers)  
Poths, H., and Co.  
Sanders, H. G., and Son  
Shirley, A. W.  
Toogood, W.  
Youldon, E.  
"W" Brand

### BOXES

Austin and Co. (Cardboard)  
Chalmers, W. B.  
Owen, J., Jr.  
Parmenter, I. W. & Co. Lim.  
Robinson and Sons

### BUTTER COLR. &c.

Clements, S. G., and Co.  
Johansen and Jørgensen  
Oldfield, Pattinson and Co.

### CAMPHOR

Fuerst Bros.  
Howards and Sons  
Keeno and Ashwell (Homoeo-  
pathic)

### CAPSULES

(METALLIC)

Betts and Co.  
Brooks, Peel and Co.  
Mellin, O. (Machines)  
Sanders, H. G., and Son

### CAPSULES

Denoual, J. (Medicinal)  
Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Hooper, B., and Co.  
Maw, S., and Thompson

### CSCRA SAGRADA

Duncan, Flockhart and Co.  
Evans, Sons and Co.  
Ferris and Co.  
Moss, J., and Co.  
Squire and Sons

### CASTOR OIL

Fuerst Bros.

### CATALOGUE

Evans, Sons and Co.  
Maw, Son and Thompson, S.  
May, Roberts and Co.  
Saugor and Son  
Schutze, F., and Co.

### CEMENT

Kay Bros. (Lim.)

### CHALK PRECIP.

Dunn and Co.  
Levermore, Aug., and Co.  
White, A., and Sons

### CHEST PROTECTRS

Bailey, W. H., and Son  
Evans, Sons and Co.  
Liverpool Lint Co.  
Sanger and Sons  
Schutze, F., and Co.  
Thompson, Walters, Hole and  
Co. (Limited)  
Wood, Vincent



## CHEMICALS

Andrea, Oscar and Co.  
Boehringer, C. F., and Sohns  
Bramwell and Co.  
Branner, Mond and Co., Lim.  
Bush, W. Son and Co.  
Dunn and Co.  
Fletcher Fletcher and Stevenson  
Fuerst Brothers  
Goodall, Backhouse and Co.  
Groff, R. W., and Co.  
Hill, A. S., and Son  
Hodgkinson, Treacher and Clarke  
Howards and Son (Pharm.)  
Kuhn, B.  
Levermors, Aug., and Co.  
Lothouse and Saltmar  
Lorenz, H.  
May and Baker  
Morris and Callard  
Moss and Co.  
Prunk, Davis and Co.  
Stern, G. and G. (Pumiline)  
Smith, T. and H., and Co.  
Type and King  
White, A., and Sons  
Zimmermann, A. and M.

## CHLORIDE OF GOLD

Rowland, L.

## CHL. OF POTASH

Burroughs, Wellcome and Co.  
Hooper, B., and Co.

## CHLORIDE OF LIME

Government Sanitary Co.  
National Chemical Co.

## CHLORODYNE

Davenport, (Brown's)  
Towle, A. P., and Son

## CHLOROFORM, &c.

Duncan, Flockhart and Co.  
Macfarlan, J. F., and Son  
Smith, T. and H., and Co.  
Wright, Layman and Umney  
Zimmermann, A., and Son

## CITRIC ACID

Hassalls (Phosphol)

## COCAINE-HYDRO.

Boehringer, C. F., and Sohne  
Howards and Sons

## COCA WINE

Armbrrecht, Nelson and Co.  
Evans, Sons and Co.  
French Hygienic Soc.

## COCOA & CHOCOLATE

Oadbury Bros  
Fry and Sons  
Bowntree and Co.  
Van Houten's Cocoa

## COD-LIVER OIL

Allen and Hanburys  
Burroughs, Wellcome and Co.  
Evans, Sons and Co.  
Hill, A. S., and Son  
Moller, P.  
Lothouse and Saltmar  
Oppenheimer Bros. and Co.  
Smith, T. J.  
Woolley, Sons and Co.  
Wright, Layman and Umney

## COFFEE

Symington and Co. (Coffee Essence)

## COLPSIBLE TUBES

Betts and Co.  
Brooks, Peel and Co.  
Sanders, H. G., and Son

## COMP. MEDICINES

Allen and Hanburys  
Blyton, Astley and Co.  
Gibson, E., and Sons  
Kerfoot, T.  
Escall, J.  
Warrick Brothers

## CONFECTIONERY

Blyton, Astley and Co.  
Gibson, E., and Sons  
Kerfoot, T.  
Escall, J.  
Warrick Brothers

## CONCENT. LIQS.

Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson

## CORN CUBES

Seabury & Johnson (Plasters)  
Thompson, M. F.  
Young, H.

## COTTON WOOL

Haynes, G., and Co. (Absorbent)  
Robinson and Sons (Absorbent)  
Sanger, J., and Sons  
Seabury and Johnson

## ORSHD LINSEED

Mumford, G. S.

## DISINTEGRATORS

Carter, J. H.

## DOG MEDICINES

Spratts (Patent)

## DENTIFRICES

Fentiman & Co.  
Jewsbury and Brown  
Kennedy, The, Co.  
Lakemao, J. J.  
Newbury and Sons  
Loch, H.  
Sutton, O., and Co.  
Thompson and Capper  
Warrick Bros.  
Woods, W. (Aroca Nut)  
Wright, C., and Co.

## DISINFECTANTS

Government Sanitary Co.  
Hamilton and Co.  
Jeyss' Sanitary Compounds  
National Chemical Co.  
Seabury and Johnson  
Sanitas Co.

## DRUGGISTS' SUN.

Ayrton and Saunders  
Bailey, M., and Co.  
Barclay and Sons (Limited)  
Davy, Humphrey, & Co.  
Evans, Lescher and Webb  
Evans, Sons, and Co. (Savara)  
Gilbertson, H., and Sons  
Hill, A. S., and Son  
Hodkin, Wilson and Co.  
Iris and Co.  
Kay Bros., Lim.  
Lynch and Co.  
Marriot, E., and Co.  
Maw, Son and Thompson, S.  
May, Roberts and Co.  
Rankin and Sons (Cork Mats)  
Sanger and Sons  
Schutze and Co.  
Thompson, Walters, Holt & Co.  
Toogood, W.  
Wood, Vincent

## DRUMS, CANS, &c.

Noakes and Co.

## EAU DE COLOGNE

Farina, J. M.

## ELASTIC HOSIERY

Wood, V.

## ELECTRIC APPAR.

Berry, F. H.  
Darton, F., and Co.  
Gent and Co.  
Orme and Co.

## EMBROICATION

Elliman, Sons and Co.

## ENAMEL

Fordham, W. B., and Sons

## ENEMAS

Bailey, W. H., and Son  
Evans, Sons and Co.  
Ingram and Son  
Lynch and Co.  
Sanger and Son  
Schutze, F., and Co.

## ENGRAVERS

Barker, W., and Son  
Corsan, J. B. (Glass)

## ESSENTIAL OILS

Rush, W., Son and Co.  
Cooking (Japan Peppermint)  
Cummock, J.  
Duckworth and Co.  
Evans, Sons and Co.  
Fitzsimmons and Fearnley  
Fratelli de Pasquale and Co.  
Hodgkinson, Treacher and Clarke  
May and Baker  
Stevenson and Howell  
Symes and Co.  
Tombard, F. F. F. F.  
Treat, B. C.  
Warrick Brothers  
Wright, Layman and Umney  
Vogt, G., and Co.

## ESSENCES

Beckett, W.  
Brady and Hinchliffe (Ld.)  
Burgoyne, Burdidge and Co.  
Bush, W. J., and Co.  
Cummock, J.  
Duckworth and Co.  
Fitzsimmons and Fearnley  
Goodall, Backhouse and Co.  
Hay, W.  
Iris and Co.  
May and Baker  
Oldfield, Pattinson and Co.  
Stevenson and Howell  
Tyler, P. (Anchovies)  
Woolley, Sons and Co.

## ETHER

Claudian, G.  
Duncan, Flockhart and Co.  
Howards and Son  
May and Baker  
Robbins  
White, A., and Sons  
Woolley, Sons and Co.  
Wright, Layman and Umney

## EXTRACTS, FLUID

Allen and Hanburys  
Barber, G., and Co.  
Burgoyne, Burdidge and Co.  
Evans, Sons and Co.  
Fletcher, Fletcher & Stevenson  
Hearon, Squire and Francis  
Hooper, B., and Co.  
Moss and Co.  
Potter and Clarke  
Wright, Layman and Umney

## EXTRACT, MEAT

Australian Meat Co.  
Bovril (Limited)  
Brand and Co.  
Brown, Hugo, and Co.  
Denney's Peptone Co.  
Liebig Co.  
"Maggi"

## EUCALYPTUS

Downie B. I. P. Co.  
Tucker, J., and Co.

## FEEDING BOTTLES

Brellitt, E. and Co., Lim.  
Evans, Sons and Co.  
Hearn, E. A., and Co.  
Hookin, Wilson and Co.  
Kilner Bros.  
Lynch and Co.  
Marriot, E., and Co.  
May, Roberts and Co.  
Thompson, Walters, Holt & Co.  
Toogood, W.

## FLY PAPERS

Ford, Shapland and Co.

## FILTERING

Doultan and Co.  
Lipscombe and Co.  
Sillitoe Carbon Filter Co.

## FOOD (Infants' & Invalids')

Allen and Hanbury  
Baelz, R., and Co.  
Brand and Co.  
Bragg, J. L. (Charcoal Biscuits)  
Goodall, Backhouse and Co.  
Hearon, Squire and Francis  
King, E., and Co., Lim.  
Liebig Co.  
"Maggi"

## GINGER ALE

Hay, W. (Essence)  
Kimmond and Co.  
Mills, R. M., and Co.

## GLYCERINE

Fink and Co.  
Fuerst Bros.  
Price's Candle Co.  
Van Geelkerken and Co.

## GRANULAR PREP.

Curtis and Co.  
Hearon, Squire and Francis  
Hill, A. S., and Son  
Kerfoot, J.  
Wright, Layman and Umney

## GUM

Fink (Arabic, &c.)  
Hyde, Nash and Co.  
Knight and Co.  
Levermore Aug., and Co.  
Macnair, J., and Co.  
Prunk, Davis and Co.

## GUTTAPERCHA

Duncan, Flockhart and Co.

## HAIR PREP.

Brodie, J. (Imperial Hair Dye)  
Chesebrough Mfg. Co.  
Edwards and Co.  
Rosene Manufacturing Co.  
Truefitt, H. P. (Limited)

## HERB BEER EXTS

Newball and Mason  
Oldfield, Pattinson and Co.  
Potter and Clarke

## HERBALISTS

Butler, Maculloch and Co.  
Newball and Mason (Extract of Herbs)  
Potter and Clarke (Extract of Herbs)  
Wilkinson, A., and Sons (Compressed Hops)

## HOMOEOPATHIC

Keene and Ashwall  
Leath and Ross  
Thompson and Capper  
Watson and Wates

## HOPS

Wilkinson, A., and Sons

## HOP ALE ESSENCE

Hay, W.

## HYPHOSPHITES

Duncan, Flockhart and Co.  
Dunn and Co.  
Fellows  
Fletcher, Fletcher and Co.  
Symes and Co.  
Type and King

## HOSPITALS

Bolingbroke House  
London Homoeopathic

## INHALERS

Anderson and Adams  
Evans Sons and Co.  
Godfrey and Ooke  
Hookin, Wilson and Co.  
Schutze, F., and Co.  
Toogood, W.

## INSECTICIDES

Sanford and Co.  
Shorey, J. F.  
Steiner and Co.  
Vogt, G., and Co.

## INK [See MARKING]

Bewley and Draper  
Duncan, Flockhart and Co.

## JELLIES (TABLE)

Southwell, C., and Co.

## KETCHUP

Tyrer, P.

## LARD

Ewen J.

## LEECHES

Fitch and Nottingham

## LIME JUICE

Evans, Sons and Co.  
Iris and Co.

## LINT

Liverpool Lint Co.  
Newcome, O.  
Robinson and Sons  
Seabury and Johnson

## LOZENGES

Allen and Hanburys  
Blyton, Astley and Co.  
Gibson, E., and Sons (Manfr.)  
Hill and Son  
Kerfoot, T.  
Pascall, J.  
Raines and Co.  
Randall and Son  
Warrick Bros.

## MACHINERY

Beyer Freres.  
Burroughs, Wellcome and Co.  
Carter, J. H.  
Goodall, E. F.  
Holroyd & Co. (Limited)  
McFerran, J.  
Mellin, O. (Capsuling)  
Werner and Pfleiderer

## MAGNESIA

Andrea, Oscar, and Co.  
Bush, W., Son and Co.  
Dinneford  
Henry, T. and W. (Calcined)  
Hill and Sons, A. S.  
Kerfoot, T. (Citrate)  
Murray, Sir James, and Son

## MALT EXTRACT, &c.

Baelz, R. and Co.  
Burroughs, Wellcome and Co.  
(Kepler's)  
Hearon, Squire and Francis  
Oppenheimer Bros. and Co.  
Pure Malt Extract Co.

## MARKING INKS

Barber, G., and Co. (Orinson)  
Hickison, J.

## MEDICINE CHESTS

Bentley, E., and Sons  
Day, Son and Hewitt (Veterinary)  
Day and Sons (Veterinary)

## MENTHOL

A1 Menthol Depot, A. W.  
Shirley, Proprietor  
Cooking and Co.  
Hookin, Wilson and Co.

## MERCURIALS

Fuerst Brothers  
Howards and Sons  
May and Baker

## METHYLATED SPIRITS

Burrough, J.  
Harvey, J. & W., and Co.  
Jones and Co.  
Macnair, J. and D., and Co.  
Phillips, G., and Co.

## METHYLENE

Robbins, J., and Co.

## MICROSCOPES

Darton, F., and Co.  
Perken, Son and Rayment

## MILK

Nestle, H. (Condensed)

## MIXING

Carter, J. H.  
Weraer and Pfleiderer

## MORPHIA

Macfarlan, J. F., and Co.  
Smith, T. and H.

## OILS, PAINTS, &c.

Anglo-American Oil Co. (Lim.)  
Colthurst and Harding  
Fox, W., and Sons  
Prunk, Davis and Co.

## OPTICIANS

Darton, F., and Co.  
Perken, Son and Rayment

## ointment BASES

Burroughs, Wellcome and Co.  
Chesebrough (Vaseline)  
Grindley (Petroleum Jelly)

## OPHTHALMIC

Pomies, Dr.

## OTTO OF ROSE

Fuerst Bros.  
Treat, L. C.

## PEPSINE, &c.

Burroughs, Wellcome and Co.  
Fletcher, Fletcher & Stevenson  
Newbery (Ingluvin)  
Warner and Co. (Ingluvin)  
Zimmermann

## PAPAIN FINES

Kuhn, B.

## PARALDEHYDE

Zimmermann, A. and M.

## PATENT AGENTS

Dukes, B.  
Horn and Son

## PATENT MEDCNS

Alofas Co.  
Armbrrecht, Nelson and Co.  
Atkinson and Barber (Infant Preserv)  
Barclay and Sons (Limited)  
Beecham (Pills)  
Bragg and Co.  
Crouch, F. B. (Wafers)  
Da Silva and Co.  
Edwards and Son  
Evans, Lescher and Webb  
Fennings' (Powders)  
Goodall, Backhouse and Co.  
Grosgrain, C.  
Holloway Pills and Oint.  
Hop Bitters Co. (Lim.)  
Invigorine Manufacturing Co.  
John's Liver Pills  
Kemp, W. H.  
Lalor (Phosphodyns, &c.)  
Lincoln (Clarke's Mix.)  
May, Roberts and Co.  
Newbery and Sons  
Radam's Microbe Killer Co. (Lim.)  
Roberts and Co. (Foreign)  
Rosene Manufacturing Co.  
Seaham (Limited)  
Smith, Saml. and Co.  
Swift's Specific Co.  
Vogel, The O. A. Co.  
Wilson, A. (Bunter's Nervine)

## PERFUMERY, FANCY SOAPS

Blondeau and Co.  
Burroughs, Wellcome and Co.  
Chesebrough Manufacturing Co.  
Chiswick Soap Co.  
Cook, E., and Co.  
Coward and Co.  
Dea Oil Co. (Limited)  
Durrant, Geo.  
Ewen (Soaps)  
Farina, J. M.  
Giraud Fils  
Greensill, T. S., and Son  
Mann, C. A., and Co.  
Mouilla Liquid Soap Co. (Lim.)  
Newbery and Sons (Roses)  
Osborne, Bauer & Cheeseman  
Pears' Soap  
Price's Patent Candle Co.  
Rosene Manufacturing Co.  
Rouse & Co.  
Sainsbury, S. (Lav. Water)  
Shirley, A. W.  
Steedman, J.  
Taylor, J. N.  
Treat, E. O.  
Truefitt, H. P. (Limited)  
Vigis, L.  
Violet  
Vogt, G., and Co.  
Warrick Brothers  
Wedlake, M.  
West, T. (Oskell's Muns)  
Woolley, Sons & Co. (Powder)

## PETROLEUM

Anglo-American Oil Co. (Lim.)  
Dea Oil Co. (Limited) (Jelly)  
Grindley and Co.

## PEPPERMINT OIL

Cooking and Co.

## PEROX. OF HYD.

Dunn and Co.  
Robbins and Co.

## PHOTOGRAPHIC

American Camera Co.  
Botwright and Grey  
Howards and Son (Chemicals)  
Marion and Co.  
Orme, J., and Co.  
Perken, Son and Rayment  
White, Alfred, and Sons

## PHARM. PREPS.

Allen and Hanburys  
Baelz, R., and Co.  
Barron, Squire and Co.  
Billault  
Brady and Martin  
Burgoyne, Burdidge & Co.  
Burroughs, Wellcome & Co.  
Chantland, G.  
Chassaing and Co.  
Claudian, G.  
Dea Oil Co. (Limited)  
Duncan, Flockhart and Co.  
Fellows  
Ferris and Co.  
Fletcher (Liqs. for Syrups)  
Fruneau, E.  
Gies Schach, & Co.  
Groff, R. W., and Co.  
Hearon, Squire and Francis  
Hewlett and Son  
Hill, A. S., and Son  
Hooper, B., and Co.  
Howards and Sons  
Keith & Co. (Conc. Tinctures)  
Lorenz, H.  
May and Baker (Phenacstine)  
Rankin and Borland  
Ricables and Co.  
Roberts and Co.  
Sodas Mineral Produce Co. Ld.  
Symes and Co.  
Tucker, J., and Co.  
White, Alfred, and Sons  
Willows, Francis and Butler  
Woolley, Sons and Co.  
Wyleys and Co.

## PINE PRODUCTS

Burroughs, Wellcome and Co.  
Stern, G. and G.

## PILL MACHINES

Pindar, J. W.  
Toogood, W. (Coaster)



<b>PILLS (Coated, &amp;c.)</b> Allen and Hanbury Anderston Apothecaries Hall Beecham, Thomas Bado's Gout Pills Evans, Sons and Co. Frere, L. Holloway's McKesson and Robbins Newbery and Sons Richards, J. M. Towler, E. T. Warner, W. R. & Co. (Coated) Wyleys and Co. <b>PLASTERS</b> Cooper and Co. Evans, Sons and Co. Johnson and Johnson Mather, W. Quilliam, J., and Co. St. Dalmas, A. De Seabury and Johnson Thompson, M. F. Young, H. <b>PODOPHYLLIN, &amp;c.</b> Kelth, B., and Co. Smith, T. and H., and Co. <b>POLISHING</b> Bradley & Bourdas (Albatum) Fordham, W. B., and Sons (Limited) Oakley, John, and Sons Griffiths, T. M. <b>PORCELAIN GOODS</b> Toogood, (E.C. Pots, reglat.) <b>PRINTING</b> Gorsan, J. R. (Glass) Bowers Bros. Cyclostyle Co. Ford, Shapland and Co. Silverlock, H. Townsend, J. Zuccato and Woolf. <b>PUMILINE</b> Stern, G. and G. <b>QUININE SALTS</b> Andrae, Oscar, and Co. Boehringer, C. F., and Sohne Howards and Sons Kuhn, B. Rivers, Hicks (Penny Quinine) Zimmermann and Co. <b>RENNET</b> Clements, S. G., and Co. Duncan, Flockhart and Co. Johnsen and Jørgensen Oldfield, Pattinson and Co. <b>RESPIRATORS</b> Schutze, F., and Co. <b>SACCHARIN</b> Allen and Hanbury Burroughs, Wellcome and Co.	<b>SALICIN</b> Macfarlan and Co. Smith, T. and H., and Co. <b>SALICYLIC ACID</b> Fuerst Bros. (Kolbe's) <b>SALOL</b> Kuhn, B. <b>SEALING WAX</b> Stewart, G., and Co. <b>SEEDS</b> Potter and Clarke <b>SELTZOGENES</b> Bratby and Hinchliffe, (Ld.) Durafort Evans, Sons and Co. Fevre, T. Geraut, E. and Co. May, Roberts and Co. <b>SAUCES, PICKLES</b> Goodall, Backhouse and Co. Tyrer, P. <b>SCHOOLS, &amp;c.</b> Central School of Chemistry and Pharmacy City School of Chemistry and Pharmacy (Lim.) Liverpool School of Pharmacy London Homeopathic and Medical School Manchester College South London School of Pharmacy, Lim. The School of Pharmacy Westminster College <b>SOAP</b> Ayrton and Saunders Blondeau and Co. (Vinolia) Chiswick Soap Co. Cook, E., and Co. Fordham, W. B., and Sons (Lim.) Pears' Soap Stern, G. and G. <b>SHOP FITTERS</b> Bowling and Goyler Bygrave, J. and W. Evans, Sons and Co. Hawke and Son Howlett, S. Natali, E. (Show Cases) Poths, H., and Co. Treble, G., and Co. Treble, G., and Son Yates, W. S. <b>SPONGE</b> Cresswell Bros. Peterson, M., and Co. <b>SPECTACLES</b> Botwright and Grey Barton, F., and Co. Perken, Son and Rayment	<b>SPIRIT</b> Bowley, S., and Son Burroughs (Furness Methyl.) Evans, Sons & Co. Harvey, J. and W., and Co. Jones and Co. (Methyl.) Macnair, A., and Co. Macnair, J. and D., and Co. Phillips and Co. Smith, Stephen and Co. <b>STAMPS (RUBBER)</b> Hickisson, J. Pollard, A. W. <b>STOPPERS</b> Austin and Co. (Sprinklers) Barnett and Foster Sanders, H. G., and Son <b>STOVES</b> Clark, S. and Co. <b>SURGICAL</b> Ayrton and Saunders Bailey, W. H., and Son Barclay and Sons (Limited) Cooking, J. T. De Luca, G. V. Eschmann Bros. and Walsh Haywood, J. H. Ingram and Son Liverpool Patent Lint Co. Maw, Son and Thompson Mestivier and Co. Robinson and Sons Schutze, F., and Co. Schoenfeld Frères Thompson, Walters, Hole and Co. (Limited) Wood, Vincent <b>STARCHE</b> Critchley (Glass) <b>SUGAR</b> Gibson, R., and Sons <b>SULFONAL</b> Burroughs, Wellcome and Co. May and Baker <b>SYPHONS</b> Barnett and Foster Bratby and Hinchliffe (Ld.) Durafort Favarger and Co. Fevre, T. Geraut, E., and Co. Kilner Bros. Prudon and Dubost <b>SYRINGES</b> De Luca, G. V. Schoenfeld Frères <b>SYRUPS</b> Fletcher, Fletcher (Liquors) Idris and Co.	<b>TILL</b> Stokes, G. R. & Co. <b>TEA</b> French and Langdale Gt. Tower St. Tea Co. Santha Tea Walker and Dalrymple <b>TOBACCO,</b> <b>CIGARETTES</b> Bowley and Co. Peacock, M. & R. Taddy and Co. <b>THERMOMETERS</b> Bailey, W. H., and Son Berry, F. H. Darton, F., and Co. Perken Son and Rayment <b>TOILET</b> Evans, Sons and Co. Fordham, W. B., and Sons (Lim.) Hopgood and Co. Mumford, G. S. Quelch, H. C. Simon, J. Truefitt, H. P. (Limited) <b>TOOTH PASTE</b> Jewsbury and Brown Sutton, O., and Co. (Block) Wilson, A. (Hunter's) Woods, M. (Areca) <b>TRADE MARKS</b> Dukes, B. Horn and Son <b>TRUSSES</b> Ayrton and Saunders Bailey, W. H., and Son Haywood, J. H. Wood, V. <b>TYPE-WRITING</b> Pollard, A. W. <b>URETHANE</b> Howards and Sons <b>VACCINATION</b> Vaccine Association (Lymph) <b>VALUERS AND</b> <b>TRANSFER AGENTS</b> Berdoe & Co. Brett, F. J. Crooker, G. B. Orridge and Co. <b>VERMIN KILLERS</b> Battle, J. R. Sanford and Son Steiner and Co.	<b>VASELINE</b> Chesbrough Manufacturing Co <b>VETERINARY</b> Rigg, T. Braggi, P., and Co. Day and Sons Day, Son and Hewitt Elliman, Sons and Co. James, W. H. (Bilster) Mère de Chantilly, P. Rookledge, J. Spratts (Dogs) Sutton, F., and Co. Walker, Troke and Co. Wyleys and Co. <b>VINOLIA</b> (Superfatted Medi- cal and Toilet) Blondeau and Co. <b>WHOLESALE AND</b> <b>EXPORT DEPOSITS</b> Allen and Hanbury Barron, Harveys and Co. Brothers, J. and Co. Burgoyne, Burdidge and Co. Bush, W., Son and Co. Clay, Dod and Co. Coward, G. F., and Co. Davy, Humphrey, and Co. Evans, Sons and Co. Evans, Lescher and Webb Evans and Sons (Limited) Faulding, F. H., and Co. Ferris and Co. Fox, W., and Sons Goodall, Backhouse and Co. Harker, Stagg and Morgan Hearon, Squire and Francis Hewlett and Son Hill, A. S., and Son Hodgkinsons, Treacher and Clarke Lofthouse and Salt Macfarlan, J. F., and Co. Oldfield, Pattinson and Co. Potter & Clarke (Amsien) Sumner, E., and Co. Symes and Co. Thompson and Capper Thompson, Walters, Hole and Co. (Limited) Walker, Troke and Co. Willows, Francis, and Butler Woolley, Jas. Sons and Co. Wright, Layman and Umney Wyleys and Co. <b>WINES, SPIRITS</b> Coleman and Co. (Meat and Durrant, G. (Orange) Malt. Goodall, Backhouse and Co. Idris & Co. Miller, A., and Co. Robinson, B.
---	---	--	--	---

# SMALL SUGAR-COATED PILLS

Unequalled in their medicinal properties or in SOLUBILITY, the best ingredients being invariably employed.

PREPARED BY

## WM. R. WARNER & CO.

Suitable for Retail Sale, in screw-capped Pill Tubes. Not liable to Stamp Duty unless specially recommended or sold as "Proprietary."

No. 142. Gran. Cath. Comp. (Little Cathartic Granules). Aloin, 1-10 gr.; Podophyllin, 1-5 gr.; Ext. Hyoscy., 1-20 gr.; Jalapin, 1-10 gr.; Ext. Nuc. Vom., 1-20 gr.; Ol. Res. Capsici, 1-20 gr. Dose 1 to 4.	Per 1,000, in Plain Bottle, 4/-.	Per Small Stoppered Vase, with painted glass label, 5/6.	Per Stoppered Vase, with painted glass label. (5,000.) 21/-.
---	----------------------------------	--	--

An "all-round" Antibilious Pill, which has found favour wherever introduced, is "No. 120" ("Pil. Cathartic and Liver").

No. 120. Pil. Cathartic and Liver. R. Podophyllin, $\frac{1}{2}$ gr.; Ext. Colooynth, $\frac{1}{2}$ gr.; P. Soc. Aloes, 1 gr.; P. Scammony, $\frac{1}{2}$ gr.; P. Saponis, 1-8 gr.; Ext. Hyoscyami, 1-8 gr.; Gingerine, 1-8 gr. Dose, 2 to 4 pills as a purgative, 1 to 2 pills as an aperient.	Per 1,000, in Plain Bottle, 4/-.	Per Stoppered Vase, with painted glass label, 6/4.	Per Bottle (Bulk) of 5,000, 18/9.
--	----------------------------------	--	-----------------------------------

DEPOT:—F. NEWBERRY & SONS,  
1 & 3 KING EDWARD STREET, NEWGATE STREET, LONDON, E.C.



PARIS EXHIBITION, 1889.  
PRIZE MEDAL AWARDED TO



# "SALVO PETROLIA"

(VASELINE).

Absolutely Genuine Paraffinum Molle of the very Purest Form, and we claim that it is superior to Vaseline.

Packed in Tins, 1, 4, 10, 14, 28, 56, and 112 lbs.

# "OLEUM DEELINÆ"

(REGISTERED).

Universally adopted by the Medical Profession for

**ECZEMA,**  
**OPHTHALMIA, SCURVY, RINGWORM,**  
**ITCH, PILES, SKIN DISEASES,**

FOR

**EXTERNAL & INTERNAL IRRITATION**  
OF EVERY KIND.

PACKED IN CASES—

One Doz. 1s. 6d. Bottles; One Doz. 2s. 6d. Bottles  
or half of each.

TESTIMONIALS MAY BE HAD UPON APPLICATION.

# "EDIBLE SALVO PETROLIA"

For Public Speakers, Actors, & Singers.  
1s. per Tube.

The above are Manufactured Solely by the Proprietors,

**THE DEE OIL COMPANY,**  
**LIMITED.**

Works—SALTNEY, CHESTER.

OFFICES:

**LONDON — 38 LEADENHALL ST., E.C.**

Liverpool, Dublin, Manchester, Glasgow, Hull, Cardiff,  
Bristol, Belfast, Barrow-in-Furness, Nottingham,  
Paris, Hamburg, &c.

## H. P. TRUEFITT'S SPECIALITIES FOR THE HAIR.

Floral Extract, 3/6, 5/-,  
10/6, 21/-

Egg Julep, 2/-, 4/-.  
CONCENTRATED

Egg Julep, 2/6,  
5/-, 10/6.

Golden Fluid,  
10/6, 21/-.

EUXURON,  
1/6.

&c.

Stimulating Lotion, 5/-,  
10/6.

Astringent and Tonic  
Lotion, 5/-, 10/6.

Quinine and Arnica  
Hair Wash, 3/6,  
5/-, 10/6, 21/-.

Arnica Wash,  
3/6, 5/-,  
10/6.

&c.

**EUCHRISMA.**  
Combines in one clear Fluid every valuable  
Component both of a Hair Grease and Wash,  
3/6, 5/-, 10/6, 21/-.

**EAU RACINE.**  
For renewing the original colour of Grey Hair;  
superior to all other Restorers, being purely  
simple in its Composition. Price 6/.

An elegant Preparation for  
the Hair and Beard.  
Price 2/6, 3/6, 5/-, 10/6, 21/-.

## BRILLANTINE.

H. P. TRUEFITT'S TONIC TOOTH BRUSH

(BY ROYAL LETTERS PATENT.)

PRICE ONE SHILLING.

20 & 21 Burlington Arcade; 13 & 14 Old Bond St., London.

BEST AND SAFEST

## DENTIFRICE

RETAIL—

No 0 Loose.. Os. 8d. each.

„ 1. In tins 1s. Od. „

„ 2. Glass... 2s. 6d. „

Wholesale of all  
the leading houses  
throughout the  
world.

OVER  
2,000  
TESTIMONIALS



## EWEN'S LARD

IS

**GUARANTEED PURE.**

EVERY GENUINE PACKAGE BEARS THEIR LABEL  
Trade Mark.



**EWEN'S**

Clarified Fat Works,  
Perfumery and

Facsimile of Label.

Toilet Soap Factory,

5 HATFIELD STREET, LONDON, S.E.



Facsimile of Label.





**E. CHEESEMAN-J. HOLDSWORTH,**  
TRADING AS

**OSBORNE, BAUER & CHEESEMAN**

Perfumers to the Queen, 19 GOLDEN SQUARE, REGENT STREET, LONDON,

**MANUFACTURERS OF THE BEST PERFUMERY IN ALL ITS BRANCHES**

AND OF PURE REFINED AND RE-MELTED SOAPS.

OLD STYLE. NOT "MILLED."

NEW SERIES OF

**AMMONIATED**

COMBINING IN ONE BOTTLE  
**SMELLING SALTS**  
AND  
**PERFUME**  
FOR THE  
HANDKERCHIEF.



( 1/2 SIZE )

**PERFUMES.**

TO BE USED AS A  
**PUNGENT,**  
AND  
IN THE USUAL WAY  
AS A  
**BOUQUET.**

**All Varieties of PERFUMES.**

AN ELEGANT PRESENT.

**One Shape. One Price. Retail 2/6.**

2 OR 3 IN FANCY BOXES.

SOLE PROPRIETORS OF THE FOLLOWING SPECIALITIES:

"BABY'S SOAP."

"CHILBLAIN JELLY."

"GLYCERINE AND HONEY JELLY."

"BAUER'S HEAD (AND BATH) SOAP."

"CRISTIN'S RUBY LIP BALM."

"THE INCOMPARABLE SMELLING SALTS,"

"Carbolic Acid and Tar Toilet Soap." "Cosmetic Petrolina Soap." "Cosmetic Petrolina Soap" (unscented). "Pure Oatmeal Soap" "Juniper Tree Oil Soap." "Marlborough Soap." "Petroleum or Dispensing Soap." "Sulphur Soap." The Real Old Windsor (blue packets) as made in the last century.



**WRIGHT'S MYRRH TOOTH SOAP.**

The Most Elegant Dentifrice on the Market.

REMOVES TARTAR. PRESERVES THE ENAMEL. PREVENTS DECAY.  
GIVES PEARLY WHITE TEETH. HARDENS & STRENGTHENS  
THE GUMS. CURES OFFENSIVE BREATH. A GEM FOR THE TOILET

Put up in an attractive manner for show case display, and contains in a modified form the medicinal properties of Myrrh. It is an elegant saponaceous Dentifrice, absolutely pure, containing no mineral or acid substance, and no ingredient entering into its composition is in the least degree harmful or unwholesome.

**8/- PER DOZEN.**

CAN BE OBTAINED OF

**H. A. GOODALL & CO.**

Bartlett's Buildings, Holborn Circus, LONDON, E.C.

**PROSPEROUS NEW YEAR**

Will be yours if you march with the times and keep only what is newest and best; so order at once our New Perfumes, "**THE SCENT OF THE LILIES**" and "**THE SCENT OF THE HAYFIELDS.**"

In 1, 2, 4, 8, and 16 oz. bottles, to Retail at 2/, 3/6, 6/6, 12/, and 21/ each.

THROUGH YOUR WHOLESALE HOUSE, OR DIRECT FROM

**G. VOGT & CO.,** 19 Laurence Pountney Lane, Cannon Street, E.C

Telegrams—"ALSACE LONDON."



# COOK'S ANTISEPTIC SOAP

(THOMSON'S PATENT),

Has been tested in a Physiological Laboratory as a Germ Destroyer, and proved to be more efficient than any other experimented with.  
(See "Journal of Chemical Industry, 1888, No. 3.) Of great value in CASES OF

## ECZEMA, RINGWORM, SCABIES, FAVUS

AND OTHER SKIN DISEASES.

See "The Lancet," 12 May, 1888, page 936.

Price in 3-Tablet Boxes, per doz. **12/-**; Selling Price, **1/6**; in  $\frac{1}{4}$ -gross Boxes, **10/6** per box.

### GOLD MEDAL, PARIS EXHIBITION, 1889.

Can be obtained through MESSRS. S. MAW, SON & THOMPSON, LONDON, or of

## EDWARD COOK & CO., HOUSEHOLD and SOAP MAKERS, LONDON, E.

# R C TREATT

Dunster House Mincing Lane

LONDON

IMPORTER OF

## Musk Civet Ambergris Attar - of - Rose

### ESSENTIAL OILS



Wholesale  
and  
Export  
only.

APPLICATION.

ON

QUOTATIONS

AND

PRICE LIST

## "Cream of Magnolia."

### MATCHLESS FOR THE COMPLEXION.

A Marvellous and Unique Preparation for Softening, Toning, and Beautifying the Skin.

INVALUABLE for removing Spots, Sunburns, Blistches, and all Imperfections.

IMPARTS A VELVETY SOFTNESS AND BLOOM.

Renders it Beautiful to the Eye, and deliciously soft to the Touch. Can be used with the most perfect safety to any child or infant.

In Bottles, post free, 2s. 6d., 4s., 7s., and 10s. 6d., or Sample Bottles, post free, 1s. 3d., direct from the Proprietor,

## JOHN STEEDMAN,

154 QUEEN'S ROAD, BAYSWATER, LONDON W.

And of all Chemists throughout the World.

ESTABLISHED 1836.

Ladies once using this Preparation will never be without it.



The only preparation for the Hair recommended by leading Physicians for the removal of Scurf, allaying irritation, preventing greyness and baldness, and producing a

### LUXURIANT HEAD of HAIR.

In Bottles to retail at 1s. 6d., 2s., 2s. 6d., 3s. 6d., 5s.

Revised Wholesale Prices, 12s. 6d., 16s. 6d., 20s., 30s., and 42s. per dozen

Supplied by all Wholesale Sundry Houses,

OR FROM THE DEPOT—

OSBORNE, GARRETT & CO., 51 Frith St., Soho, London, W.

## EDWARDS' INSTANTANEOUS HARLENE



Positively forces the HAIR, WHISKERS, and MOUSTACHIOS to grow heavily in a few weeks without injury to the skin, and no matter at what age. The world-renowned remedy for baldness from whatever cause arising. As a producer of whiskers and moustachios it has never been equalled. As a curer of weak and thin eyelashes, or restoring grey hair to its original colour, it never fails.

1/-, 2/6, 3/6, and 5/6 per Bottle.

NOTICE.—Show-cards and Circulars, Terms, and all other Particulars may be had by writing direct to us.

Agents Wanted, Country and Abroad.

## EDWARDS & CO.

50 NEW OXFORD ST., LONDON, W.C.







# POPULAR COUNTER LINES.



Henri Frères Soaps. Soap a popular counter line? Not at all. Grocers are doing all the soap trade. Whoever now thinks of coming to a Chemist for soap? Well and good, so you say. We admit grocers are doing the Proprietary Soap trade at cut prices. But for over two years we have been handling Henri Frères Fancy Soaps, and the sale has been so extensive that we have made special efforts and succeeded in obtaining the *Sole Agency* for them. Over and over again, when offering them to our clients, they have said, "Put them away; we can't sell soap now." Well, we have, after some trouble, got them to take a sample lot, and we believe, without exception, we have had repeat orders almost immediately. Indeed, we ourselves have been surprised at the large sales. The Soaps themselves are splendidly made—fully matured, beautifully finished, and *warranted perfectly pure*. Each Tablet is wrapped in two papers, and has no price marked on. The following are the most going lines, and A. & S. are *confident*, if only a sample box of each is ordered and displayed on the counter, *money will be made*.

## Henri Frères Oatmeal Soap.

3/6 per doz., packed in 1 doz. boxes for the counter.

## Henri Frères Cold Cream Soap.

3/6 per doz., in 1 doz. outers for the counter.

## Henri Frères Glycerine and Cucumber Soap.

3/6 per doz., in 1 doz. outers for the counter.

## Henri Frères Watercress Soap.

3/6 per doz., in 1 doz. outers for the counter.

## Henri Frères Carbolic and Glycerine Soap.

2/3 per doz., in 3 doz. wood outers.

## Henri Frères Sulphur Cream Soap.

2/3 per doz., in 3 doz. wood outers.

## Henri Frères Pine Tar Soap.

2/3 per doz., in 3 doz. wood outers.

## Henri Frères Sweet Flower Soap.

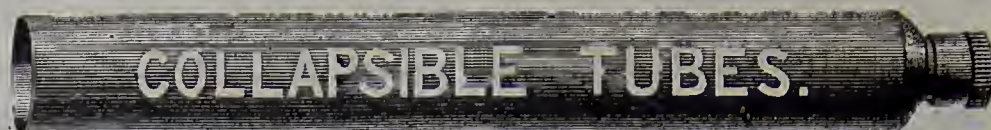
2/3 per doz., in 3 doz. wood outers.

Above can be had from any Wholesale House in the Provinces, or  
**MESSRS. EDWARDS & SON, Queen Victoria Street, London.**

*A Sample Tablet of each forwarded, Post Free, for 2/6 by*

**AYRTON & SAUNDERS, 149 DUKE ST., LIVERPOOL.**





METAL BOTTLE CAPS  
AND  
SCREWED BOTTLES.

For Paints, Perfumes, Soaps, Creams, Oils, and all Fluid  
or Semi-Fluid Substances.

PERFUME SPRINKLERS  
AND  
BOTTLES.



**H. G. SANDERS & SON**  
**MANUFACTURERS,**

VICTORIA WORKS, VICTORIA GARDENS, NOTTING HILL GATE,  
**LONDON, W.**

TELEGRAPHIC ADDRESS: "COLLAPSIBLE LONDON." ESTABLISHED 1820.



[4]

## **M. BAILEY & CO.** **MANUFACTURERS OF DRUGGISTS' SUNDRIES.**

M. B. & Co. beg to call the attention of the Trade to the following articles manufactured by them:—

Glass Syringes, Nipple Shields, Breast Exhausters, Fittings for Feeding  
Bottles, Tubes, and Tube Work in all its branches, &c., &c.

*Sole Proprietors and Manufacturers of J. Brooks & Co.'s celebrated Specialities:—Winter Cream,  
Lip Salve, Solidified Camphor Cream, Glycerine Jelly, Perfumery, &c., &c.*

Buyers are cautioned against imitations of these World-renowned preparations. None are genuine unless bearing  
our Registered Trade Mark.

MAY BE OBTAINED THROUGH ANY OF THE WHOLESALE HOUSES. WHOLESALE AND EXPORT ONLY FROM

**M. BAILEY & CO., 32 and 34 Buckingham Road, KINGSLAND, N.**



## **BETTS & CO., LIMITED**

(ESTABLISHED IN 1840),

SOLE MAKERS IN GREAT BRITAIN OF

## **METALLIC CAPSULES,**

AND PATENTERS OF THE

## **COLOURED SIDE MARK, LABEL, AND OTHER SPECIALITY CAPSULES**

(For the Prevention of Fraud and Refilling of Old Labelled Bottles), as supplied to BASS & CO., HENNESSY AND  
MARTELL COGNAC, and the leading Brewers and Bottlers of Wines and Spirits throughout Europe.

## **PLAIN ORDINARY CAPSULES,**

For Small Phials, 2s. 6d. and upwards per 1,000, according to size, style, design, and quantity.

SPECIAL CONTRACTS FOR CONTINUOUS DEALING.

Manufacturers of Pure English-made Bottling and Package Tinfoil, from 1s. per  
lb. and upwards; Mixed Foil (Foreign Quality), from 6d. per lb. (according to gauge); Patent  
Barrel Packages and Snuff Canisters, Tea Packages, &c.

## **COLLAPSIBLE TUBES AND SPRINKLERS** FOR PERFUMERS AND OTHERS.

**MANUFACTORIES:**—LONDON: Chief Office and Factories, Wharf Road, City Road, E.C.; and Holloway and  
Batavia Mills, Holloway, N.W.—BIRMINGHAM: Moor Green Fields.—PARIS: Office, 65 Rue Verrerie.—  
BORDEAUX: Office, 3 Quai de Chartrons; Factory, Monrépos, Floirac.

## **PATENTEES OF HYDRAULIC & MECHANICAL PRESSURE CAPSULING MACHINES,**

ESPECIALLY ADAPTED FOR CHEMISTS' COUNTERS.

Largely in use by the Trade, and efficiency guaranteed for all sizes of Bottles, at Royalties from 5s. to £2 2s. per annum:



# SHIRLEY'S A1 BRAND MENTHOL CONES



Any who have not already had one of the well-known and delightful CHINA SHOW FIGURES of "THE LITTLE CRIER," should at once get one, as it will be found greatly to assist the sales of MENTHOL CONES, as well as being an ornament to the counter or window. Special parcels have been arranged to suit all classes of trade:—

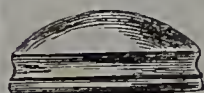
Parcel 1. 25/- 4 doz. 2d. 1 doz. 3d. 2 doz. 3½d. 3 doz. 4d. 2 doz. 6d.	Parcel 2. 25/- 4 doz. 6d. 2 doz. 4d. 1 doz. 1s.	Parcel 3. 25/- 3 doz. 3d. 2 doz. 1s. 1 doz. 4d.	Parcel 4. 25/- 1 doz. 9d. 2½ doz. 1s. ½ doz. 1s. 6d.
Parcel 5. 40/- 4 doz. 2d. 2 doz. 3d. 3 doz. 3½d. 5 doz. 4d. 4 doz. 6d.	Parcel 6. 40/- 5 doz. 6d. 3 doz. 4d. 2½ doz. 1s.	Parcel 7. 40/- 4 doz. 6d. 4 doz. 4d. 1 doz. 9d. 2 doz. 1s.	Parcel 8. 40/- 4 doz. 1s. 2 doz. 9d. ½ doz. 1s. 6d.

The following can be well recommended as Good Value and Saleable Patterns:—



No. 112.

- No. 113.—6d. Boxwood, Cartridge Shape... 3/6  
 „ 8P.—6d. Boxwood, Acorn Shape ... 3/3  
 „ 111.—1s. Boxwood, Acorn Shape ... 7/  
 „ 113R.—6d. Boxwood, Reversible Shape 3/6



No. 17F.

A1 MENTHOL  
OINTMENT.

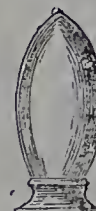
Elegantly put up in  
blue pots,  
8/ per dozen.



Nos. 8P &amp; 111.

A1 MENTHOL  
and  
COCAINE  
TOOTHACHE  
TUBE.  
Sell Well.  
3/6 doz.  
12 on a card.

- No. 17F.—Very large flat boxwood (a perfect pocket shape) ... 5/  
 „ 112.—Boxwood Draughtsman ... 3/3  
 „ 113.—Large English willow Pedestal ... 2/6



No. 109.

- No. 13A.—Vegetable Ivory Acorn ... 5/3  
 „ 17VI.—Vegetable Ivory, Flat ... 6/  
 „ 17E.—Handsome Ebony do. 6/6  
 „ 26A.—6d. Glass Shade on China ... 3/6  
 „ 27A.—1s. ditto ... 6/3  
 „ 29.—Cut Glass Shades, elegant cuttings... 10/  
 „ 32.—Colored Metal Shades on boxwood foot... 3/



No. 112.

A1  
MENTHOL  
INFLUENZA  
SNUFF.  
3/6 and 7/- doz.

The following boxwood cases have directions printed on the boxwood.

- No. 6.—Pedestal Shape... 3/6 per doz.  
 „ 11A. „ „ ... 3/  
 „ 14A. „ „ ... 6/3  
 „ 9S.—Skittle Shape ... 3/6  
 „ 17S.—Draughtsman Shape ... 3/9  
 „ 17L. „ „ ... 6/6

\*\* Buyers of a gross and upwards can have name and address printed on the cases free of charge in any language.

## 1d. 2d. & 3d. Menthol Cones for those obliged to sell cheap lines.



No. 110.



No. 110V.



No. 110P.

- No. 110.—1d., bottle shape, 3 doz. on a card... 7/- per gross.  
 „ 110V.—1d., vase „ 3 „ „ ... 7/3  
 „ 110P.—1d., pedestal „ 3 „ „ ... 7/9  
 „ 114.—2d., „ „ 2 „ „ ... 16/  
 (Varnished)  
 „ 115.—3d., Draughtsman 2 „ „ ... 20/  
 (Varnished)

Carded  
with  
Elastic,  
NOT  
Glue.

## SPECIAL QUOTATIONS TO LARGE BUYERS!!

State distinctly when ordering, Shirley's A1 Brand.

**ARTHUR W. SHIRLEY, 55 FARRINGDON ROAD, LONDON, E.C.**  
 (WITHIN A MINUTE OF FARRINGDON STREET STATION.)



# EAU DE COLOGNE

OF THE MOST ANCIENT DISTILLER,

**JOHANN MARIA FARINA,**  
**Opposite the Julichs Place, COLOGNE,**  
 ESTABLISHED A.D. 1709.

PRIZE MEDALS:—LONDON, 1851 AND 1862; OPORTO, 1865; PARIS, 1867; VIENNA, 1873.

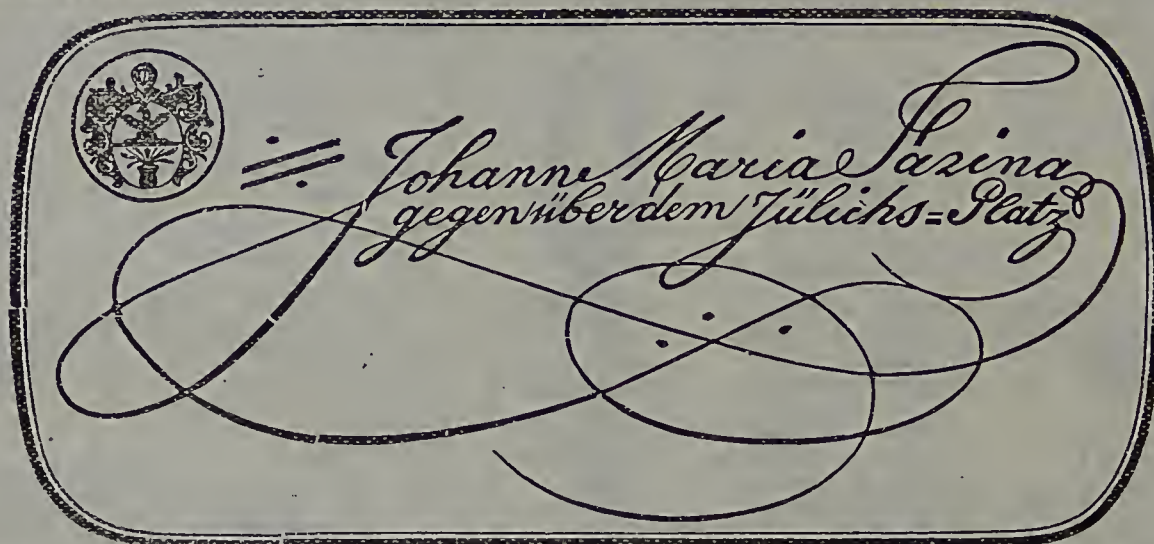
By appointment, Sole Purveyor to Her Most Gracious Majesty Victoria, Queen of Great Britain & Ireland; Their Royal Highnesses the Prince and Princess of Wales; Albert II., King of Saxony;



Their Majesties, William II., German Emperor and King of Prussia; Alexander II., Emperor of Russia; Francis Joseph, Emperor of Austria; Lewis, King of Portugal.

In consequence of increasing inquiries from the Colonies for my Eau de Cologne, the only genuine, I beg to submit my Price Current.

At the same time I beg to call special attention to the following facsimile of my Trade Mark for the protection of which I have instituted thirteen suits in the High Court of Chancery, all of which have been decided in my favour.



All similar Labels being more or less imitations of the same, I shall proceed as before against all persons selling or exposing for sale any such imitations.

I only prepare one quality of Eau de Cologne. This quality never varies in the slightest degree, and there has not been the smallest change in the manufacture since the year 1709, when it was invented by my ancestor.

Orders equal to at least 12 dozen short bottles will be promptly executed at 13s. 6d. per dozen, against my bill drawn at three months from the date of invoice, delivered free on board the export ship, at Rotterdam, Antwerp, Hamburg, or Bremen, no charge being made for the case and packing, but insurance charged extra. 7½ per cent. discount is allowed for orders equal to at least 100 dozen, but on no smaller quantities.

I may add that, as I do not draw on the Colonies, all Orders must be accompanied by a credit on some London House, or permission to draw on same at three months.

The Goods can also be shipped in transit through London at a very small additional expense, full particulars of which may be obtained of my Sole Agents for Great Britain and Ireland:—

**MESSRS. J. & R. McCracken,**  
**No. 38 Queen Street, Cannon Street, London, E.C.**

The following are the sizes of my bottles:—

No. 1. Long Green Flasks	—	—	—	—	—	—	12 bottles	} to one dozen.
" 2. Short White Bottles	—	—	—	—	—	—	12 "	
" 3. Double ditto	—	—	—	—	—	—	6 "	
" 4. Wickered Bottles (small)	—	—	—	—	—	—	8 "	
" 5. ditto (medium)	—	—	—	—	—	—	4 "	
" 6. ditto (large)	—	—	—	—	—	—	2 "	

**JOHANN MARIA FARINA**

COLOGNE: January, 1890.

**OPPOSITE THE JULICH'S PLACE.**



# SACHET POWDERS

The interest attaching to the increased demand for dry perfumes makes the subject just now of special importance. On account of the limited demand heretofore there has been no active competition in the manufacture of Sachet Powders. This fact will in a great measure account for the wide difference noticeable in the quality put out by different makers. The greater proportion of these powders contain only the ordinary showy filling of rose leaves, fragrant woods, buds and roots, which have little more life than dried autumn leaves when compared to a fragrant perfume. Can Sachet Powders be made to give as good satisfaction as the Extracts? Yes; if you know how to use them. Work boxes, handkerchief and glove cases may be lined with these powders, so as to give off their perfumes indefinitely. Kid gloves and dressed leather of all kinds may be more delightfully perfumed with Sachet Powders than with any of the liquid perfumes, and, too, without the risk of soiling. Sealskin, sable, and other fur may be given a delicate perfume with these powders. It often happens that the pelts of fine furs are not perfectly dressed, and in time acquire a peculiar odour, especially when subjected to dampness. Sachets, placed amongst such furs, will permanently improve and sweeten them. How many odours is it advisable to make? Not over a dozen. Why? Because the range of material is limited, and a few well-combined odours will meet the public demand even better than a long list, many of which are but reproductions of the same odour. Druggists should carry not less than six odours, in 8-ounce or 16-ounce glass-stoppered bottles, for supplying those who do fancy work, and others wanting them in bulk. Then a few dozen packets in satin, lettered in gilt, for placing in trunks and drawers. The six odours most popular are White Rose, Jockey Club, Violet, New Mown Hay, Heliotrope, and Frangipanni.

*SATIN PACKETS, Lettered in Gilt* ... .. 1.75 dollar per dozen

The following are put up in glass-stoppered bottles.—One ounce, in 2-ounce bottle, 4 dollars per dozen. Quarter pound, in 8-oz. bottle, 12 dollars per doz. Half pound, in 16-oz. bottle, 24 dollars per doz.

Catalogue and New Supplement sent on application.

**C. A. MANN & CO.**  
**48 MURRAY STREET, NEW YORK.**  
 PRIZE MEDAL, PARIS, 1889.



Facsimile of the  $\frac{1}{4}$ -lb. Size.

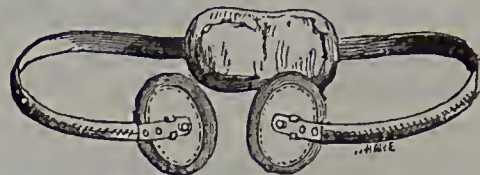
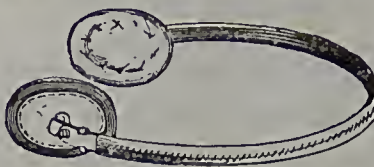
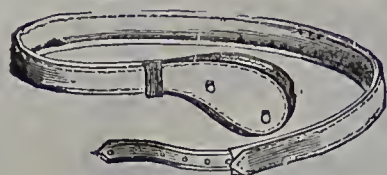




# TRUSSES.



THE BEST FOR SHAPE AND QUALITY. FIRST PRIZE, 1879.



MANUFACTURED THROUGHOUT ON THE PREMISES.  
GREAT FACILITIES FOR MANUFACTURE AND QUICK DESPATCH OF SPECIAL TRUSSES.

**BAILEY'S TRUSSES FOR SCROTAL HERNIA.**

**BAILEY'S INDIARUBBER TRUSSES FOR INFANTS.**

MANUFACTURERS and DEALERS in all kinds of SURGICAL APPLIANCES, WHOLESALE and for EXPORT  
*Shippers and the Wholesale Trade Supplied on Best Terms and Lowest Prices.*

**W. H. BAILEY & SON, 38 Oxford St., LONDON**

ILLUSTRATED CATALOGUE AND TERMS ON APPLICATION.

**COCKING'S ADAPTABLE PORO-PLASTIC JACKETS AND SPLINTS.** Patentee and Sole J. T. COCKING, PLYMOUTH.

Cervical Jacket, No. 1. Cervical Jacket, No. 3.

INSTRUCTIONS  
FOR MEASUREMENT.

## JACKET

(in cases of slight deformity)

Circumference at axilla.

" waist.

" hips.

Length from axilla to great trochanter.

In severe angular cases circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

## CERVICAL JACKETS.

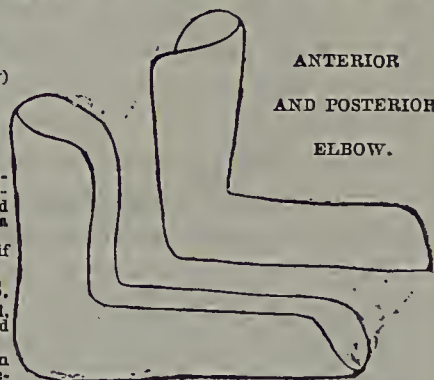
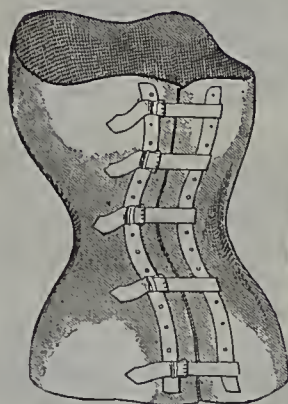
Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.

ANTERIOR

AND POSTERIOR

ELBOW.



A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION

BY ROYAL LETTERS PATENT, NO. 16,713.—DECEMBER 20, 1886.

## GODFREY'S CHLORIDE of AMMONIUM INHALER

Catarrhal Throat and Ear Affections, Loss of Voice,  
Bronchial Asthma, and Hay Fever.

The **SIMPLEST FORM OF INHALER.**

VERY PORTABLE. CONTAINS NO WATER.

Silver Medal, Brussels Exhibition, 1888. Yields a plentiful cloud of Neutral Vapour, with little or no effort on the part of the patient.

**SHIPPERS & LARGE BUYERS SUPPLIED ON LIBERAL TERMS.**

**PRICE 7s. 6d. RETAIL.**

May be obtained through S. MAW, SON & THOMPSON, London.  
Illustrated Prospectus, with the "History of Chloride of Ammonium as a Remedial Agent," free by post. **SOLE MAKERS—**

**GODFREY & COOKE,** 30 Conduit Street, LONDON, W.  
Bond Street,





# THE SKIN.

LONDON.]

FEBRUARY 22.

[1890.

## Some Drugs Employed in the Treatment of Skin Diseases.

### ARSENIOUS ACID.

Hutchinson reports the curative action of Arsenic in *Lichen Planus*. It has also been successfully employed as a remedy in *Pemphigus*.

Arsenious Acid Tabloids, 1/100 and 1/50 gr., supplied to the Trade in bottles of 100, at 8s. 6d. per dozen. Retail, 1s. each.

### CALCIUM SULPHIDE.

Ringer reports very favourably of the employment of this drug in the treatment of boils and carbuncles. Calcium Sulphide is used as an alternative in conjunction with other remedies in the treatment of Skin Diseases.

Calcium Sulphide Tabloids, 1/10 gr., supplied to the Trade in bottles of 100, at 8s. 6d. per dozen. Retail, 1s. each.

### CASCARA SAGRADA.

In most cases of Eczema, Cascara Sagrada is prescribed as a laxative. Cascara Sagrada stimulates the liver and helps to eliminate any excess of uric acid, which is believed to co-exist with, or to be the cause of, many such troubles.

Cascara Sagrada Tabloids, 2 gr., supplied to the Trade in bottles of 24 and 100, at 7s. 6d. and 22s. per dozen. Retail, 1s. and 2s. 6d. each.

### SULPHUR.

In skin affections, &c. the exhibition of sulphur has been attended with success in morbid conditions of the alimentary canal and pulmonary passages, cystitis, and diseases of the urinary tract, chronic articular diseases and morbid conditions of the muscular system.

The Compound Sulphur Tabloids (Sir A. Garrod's Formula) are perfectly preserved, packed in oval bottles, convenient for carrying in the waistcoat pocket, and for palatability and elegance are a distinct advance in the pharmaceutical preparation of this drug.

Compound Sulphur Tabloids supplied to the Trade in bottles of 25 and 100, at 4s. 6d. and 12s. 6d. per dozen. Retail, 6d. and 1s. 6d. each.

### LANOLINE.

#### A NON-IRRITATING BASIS FOR OINTMENTS.

The *British Medical Journal* speaking of Lanoline says:—"Its peculiar features are its purity and antiseptic quality, and the fact that it does not become rancid or harbour germs. In this new form Lanoline comes very near to perfection to those qualities of an unguent basis that are claimed for it."

Lanoline is now of a creamy tint, odourless, very slightly adhesive, and the price is considerably lower than when it was first introduced. Where a cheaper

product is desired, we have prepared another base (Unguentum Lanolini) containing 20 per cent. of paraffin. This homogeneous mixture, like pure Lanoline, is miscible with Tar, Huile de Cade, Ichthyol, and all other agents employed as topical applications in the treatment of skin affections.

Unna and Jamieson have directed attention to the necessity of employing water in ointments; in this respect Lanoline is the only fat which will absorb any appreciable quantity of water.

Lanoline (Liebreich) supplied to the Trade in 1-lb. and 7-lb. tins at 2s. 8d. per lb. Anhydrous Lanoline (Lanolinum Anhydricum), at 3s. 4d. per lb. Lanoline Ointment Base (Ung. Lanolini), 2s. 2d. per lb. Anhydrous Lanoline Base, 2s. 10d. per lb. Lanoline Cold Cream supplied in pots at 1s. 2d. each. Lanoline Toilet Soap, 8s. per doz. Toilet Lanoline, in tubes at 4s. 6d. per doz. Lano-Creolin, in tubes, at 9s. per doz. Lanoline Hazeline Ointment, 14s. per doz.

### ICHTHYOL.

#### FOR INTERNAL AND EXTERNAL USE IN SKIN AFFECTIONS.

Ichthyol, discovered by Schröter, is distilled from a peculiar bitumen found in the Tyrol, and has the consistency of purified coal tar.

Unna gives the following directions for its use:—

Internally.—Ichthyol is indicated:

(1.) In skin diseases: Acne rosacea, nervous forms of eczema, eczema from teething, lichen urticatus, erythema multiforme, dermatitis, furunculosis (not indicated in psoriasis).

(2.) In the following other diseases (after five years' experience): In acute and chronic rheumatism, chlorosis, tuberculosis and scrofula, and vascular engorgements of any kind. Professor Zuebzer, of Berlin, thinks that Ichthyol acts as a tonic, by preventing organic waste. He gave the salts of Ichthyol (ammonium and sodium sulpho-ichthyolates) either in capsules or pills, and of these one or two capsules each containing 4 grains every two hours, or three or four pills of 2½ grains repeated every two hours. Ichthyol is very valuable as an external application for the treatment of acne, eczema, and lichen.—*British Medical Journal*, Vol. I., fol. 800, 1887.

An ointment containing 50 per cent. of Ichthyol is highly recommended externally for psoriasis, and in debilitated subjects with very sensitive skins.—*Lancet*, Vol. II., fol. 577, 1885.

Ichthyol is compatible with mercury and its salts, also with zinc or lead ointments. Lanoline is the best basis for the preparation of an ointment. A mild ointment is said to be regenerative, a stronger one resolvent.

Ichthyol supplied to the Trade at 15s. per lb., also in 1-oz. bottles at 16s. per doz.

Ichthyol Capsules (4 min.) in bottles of 50, at 27s. per doz.

Ichthyol Pills (2 grs.) in bottles of 100, at 27s. per doz.

Ichthyol Soap, 8s. per doz.

**BURROUGHS, WELLCOME & CO., SNOW HILL BUILDINGS, LONDON, E.C.**

Above Prices subject to usual discount.



# "VASELINE," in 1d., 2d., & 3d. TINS.

All nicely wrapped, and stamped with the name of

THE CHESEBROUGH MANUFACTURING CO., the Proprietors and Sole Manufacturers.

**NONE OTHER GENUINE.**

1d. Tins, One Gross in Wood Box at 8/-, Five Gross assorted, 7/2 per Gross net.  
2d. Tins, One " " 16/- " 14/- "  
3d. Tins, Half " " 24/- " 21/- "

*Of all Wholesale Houses, or  
Sample Boxes Carriage paid  
on receipt of Postal Order.*

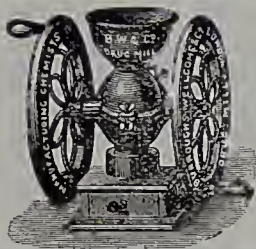
**CAUTION.**—The fancy word "VASELINE" is the Registered Mark, and is the exclusive property of this Company, and indicates *THEIR* make and putting up of *THEIR* preparations of Petroleum Jelly.

SHOW CARDS AND CIRCULARS ON APPLICATION.

42 HOLBORN VIADUCT, LONDON, E.C.

## THE BEST DRUG MILL.

CONSTRUCTED ON AN IMPROVED PRINCIPLE. CUTTERS REMOVABLE FOR INSPECTION OR CLEANING.



This Mill can be regulated to grind to any degree of fineness or coarseness required, and by the mere turning of a thumb-screw can be opened and the cutters removed in a minute. The form of the cutters is designed so as to crush and reduce to powder almost any pulverisable substance, effectually and quickly, at the same time that the cutting edge is never destroyed, thus saving the expense of re-cutting, incident to the ordinary Mill. The cutters always keep their edge, and never require re-toothed; if broken they can be replaced at a trifling cost. In this Mill alone there is no danger or loss resulting from grinding any number of different substances in succession, because between each operation the Mill can be opened, the cutters taken out, cleaned, and replaced with the greatest ease.

Professor Maisch, Philadelphia Col. Pharmacy, U.S.A., says:—"The best Mill that has been devised. One of the prominent advantages is the facility with which the internal working parts can be viewed by simply turning one screw."

Prices.—Plain (3a), 36/-; (4a), 54/-; (4½a), 90/-. Ornamented (3a), 45/-; (4a), 65/-; (4½a), 100/-. Subject to usual discount.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.

## DRAPER'S INK (DICHROIC)

THE NEW BLACK INK, different from anything else ever produced.

Writing becomes a pleasure when this Ink is used. It has been adopted by the principal Banks, Public Offices, and Railway Companies throughout Ireland.

It writes almost instantly full black.

Does not corrode Steel Pens.

Dries rapidly on the Paper.

Is cleanly to use, and not liable to blot.

Flows easily from the Pen.

Blotting-paper may be applied at the moment of writing.

In Jars, 6d., 1s., and 2s. each.

Can be obtained, in London, through Messrs. BARCLAY and SONS, Farringdon Street; W. EDWARDS and SON, 157 Queen Victoria Street, E.C.; F. NEWBURY and SON, Newgate Street; S. MAW, SON, and THOMPSON, Aldersgate Street; HAYDEN and Co., 10 Warwick Square, Paternoster Row; HOVENDEN and SONS, City Road; AYRTON and SAUNDERS, Duke Street, Liverpool; GOODALL, BACKHOUSE and Co., Leeds; JNO. HEYWOOD John Dalton Street, Manchester; JAMES HEMINGTON, 6 Moor Street, Birmingham; HENRY HODDER, Broad Street, Bristol.

**BEWLEY & DRAPER, Limited, DUBLIN.**

See "CHEMIST AND DRUGGIST," December 15th, 1874.

## BENGER'S PREPARATIONS

GOLD MEDAL AWARDED, HEALTH EXHIBITION, LONDON.

"Mr. Benger's admirable Preparations."—LANCET.

### LIQUOR PANCREATICUS (BENGER).

For preparing peptonised or partially digested milk, soups, &c. Bottles, 2/6, 4/6, and 8/6, with full directions.

### BENGER'S PEPTONISING POWDERS.

Colourless, odourless, and soluble. One will peptonise a pint of milk, &c., in 10 to 15 minutes. Boxes of 12 powders, 2/6.

### LIQUOR PEPTICUS (BENGER).

An exceedingly active fluid pepsin. Dose, one to two teaspoonfuls with meals. Bottles, 3/ 5/6, and 10/6.

### BENGER'S PEPTONISED BEEF JELLY.

A delicious quick restorative; will keep in any climate. Tins, 2/ each.

### BENGER'S PEPTONISED CHICKEN JELLY.

A nutritive delicacy for Invalids. Tins, 2/ each.

### BENGER'S FOOD (Pancreatized).

For Infants, Children, and Invalids. This delicious and highly nutritive food is distinguished from others by the ease with which it can be digested and absorbed. Tins, 1/6, 2/6, 5/, and 10/.

### BENGER'S NEW ESSENCE OF RENNET.

For making pure whey, jnnkets, &c. Bottles, 1/ each.

BENGER'S PREPARATIONS are obtainable through all leading Wholesale Houses or of the Manufacturers,

MOTTERSHEAD & CO. (S. PAINE & F. B. BENGER), PHARMACEUTICAL CHEMISTS, MANCHESTER.





ESTABLISHED 1859.

PRINCIPAL OFFICE, 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE, SYDNEY, AND NEW YORK.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN & Co.

Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ:—

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

## Literary Contents.

PAGE	Editorial Notes—(cont.) :—	PAGE
Arsenic in Glycerine.....	How Viscous Mixtures are	
At the Counter .....	Formed; Apothecaries and	
Bankruptcy Reports .....	Druggists in Germany ....	261
Commentary .....	Gazette .....	255
Concentrated Infusions and	General and Provincial News..	246
Decoctions .....	Hints for Pharmacists .....	249
Corner for Students .....	Lectures by Pharmacists .....	256
Correspondence :—	Legal Reports .....	253
The Pharmacy Acts Amend-	Marriages .....	255
ment Bill; Reform of the	Metropolitan Reports .....	243
Pharmaceutical Society ..	New Companies .....	265
The Medicine Stamp; Ung.	Notes on Novelties .....	264
Resinæ Acid; The Sheffield	Personalities .....	255
Drug Raid .....	Pharmaceutical Society of	
Legal Queries ....	Great Britain :	
Dispensing Notes .....	Evening Meeting in Edin-	
Miscellaneous Inquiries ..	burgh .....	247
Information Supplied .....	Pharmacy Act (Ireland)	
Deaths .....	Amendment .....	252
Editorial Notes :—	Provincial Reports .....	243
Poisonous Patent Medicines	Reviews .....	263
Pharmaceutical Legislation	Trade-marks applied for .....	266
for Ireland; A Phase of	Trade Notes .....	264
Applied Chemistry .....	Trade Report .....	268
From the Front of the Counter	Wills of Deceased Chemists ..	267

## POST-CARD COMPETITIONS, 1890.

### THE PILL-MILL.

We ask competitors this month to estimate the average number of pills supplied to the public every day in the British Isles. They can reckon from a week's trade how many of their own stock pills they sell daily, how many factory-made pills they have sold, how many they dispense, and about how many are contained in the patent medicines they supply. Finding thus their own daily average, they may roughly multiply this by 10,000 for the quantity sent out by chemists, and this total must be further very largely developed by adding what they think medical men, grocers, and others send out. We only want for competition the one total figure in numerals. This must be stated exactly, not in dozens or grosses or thousands. We shall add all these figures together, and give the usual guinea prize to the competitor who gets nearest to the average.

No card will be admitted which reaches us after February 28, and no person may send in more than one card.

## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

AUBRESPY'S BLACK LICORICE FACTORY, at Uzès, near Avignon, has been entirely destroyed by fire. The losses are estimated at over 200,000*fr.*, partly insured. The disaster will leave 200 men out of employment.

THE XIXME SIÈCLE AND THE CHEMIST AND DRUGGIST.—M. Raoul Lucet (R. L.), the able scientific editor of the *XIXme Siècle*, is gently sarcastic towards you in an article published in that journal on Monday last. Under the title of "Epicerie Antiseptique" M. Lucet repeats some previously expressed doubts of the "great discovery of the pretended antiseptic virtue of the aromatics," and supports his scepticism by publishing the translation of a communication which appeared in THE CHEMIST AND DRUGGIST (February 8, page 203), in which Mr. C. A. Serre gives his experiences of influenza. The translation has been supplied, says R. L., by one of the readers of his journal, M. E. de Franciesi, but it must be said that it is a little loose. For instance, the people first attacked, said the writer, were dealing with "antiseptics, essential oils, &c."; this is rendered "antiseptic essences." Other slight inaccuracies occur, but of course the letter supports R. L.'s views. But, he adds, "this does not prevent the same journal from proclaiming on another page the infallibility of thymol, camphol, and other *babioles* against influenza. Thus it is that therapeutics, like history, are written." I do not find this proclamation in the same journal, either in the text or among the advertisements. But even were it the case, the same apparent contradiction is common in all scientific papers, when all sides are free to express an opinion on disputed points. R. L.'s conclusion, however, cannot be gainsaid. The Sphinx of influenza has not disclosed its secret to the disciples of Æsculapius.

THE "OFFICIERS DE SANTÉ" MUST GO.—Physicians of this category are to doctors of medicine what pharmacists of the second class are to their brethren of the first class. Lacking the preliminary education necessary to take the baccalaureate degree, they are relegated to the second rank, limited in their practice to one department of the Republic, forbidden to perform serious surgical operations, and debarred from acting as experts before the courts. Worse than all, the new military law refuses them the partial exemption which is granted to candidates to the doctorship and enables these to pursue their studies. They, poor fellows, must serve their three years in full. The only advantage left them is the lower cost of their inferior diploma. But even that gives umbrage to the doctors, who want to abolish "officiers," just as pharmacists of the first class try their best to extinguish those of the second, as well as herbalists. The Medical Bill now before Parliament edicts for them "la mort sans phrases," and Minister Fallières, on being consulted by the committee in charge of the Bill, gave it as his opinion that there was no objection to the measure, only he thought it hardly necessary to abolish by law officers de santé, as they will surely abolish themselves by natural extinction, the new military law virtually rendering their college training impossible. The ministerial provisions cannot well be disputed, yet the modest "officiers," like pharmacists of the second class, have their usefulness in social economy. Although a knowledge of Greek, Latin, mathematics, and such, may not seem essential to make a good physician or pharmacist, experience and college statistics have shown that students unprovided with the baccalaureate degree—and all intelligent boys now can readily secure a scholarship—prove in the faculties and colleges intellectually inferior to their better-equipped fellows. Nevertheless, when graduated, they are far from insufficient or incapable; besides, holding more modest views, they form the main reliance of most country towns and villages. The Parliamentary committee think doctors of medicine will take the place of the discarded officers. No one can tell, but it hardly looks like it, as official statistics just published show that during the past ten years, although the number of medical students has nearly doubled (3,500 to 6,455 for the whole country), the number of graduates has decreased from 690 to 580. At this rate, country people will soon have for sole medical attendants farriers and quacks.



# CORNER FOR STUDENTS.

CONDUCTED BY RICHARD J. MOSS, F.C.S., F.I.C.

## QUALITATIVE ANALYSIS.

A MIXTURE of two salts will again form the subject of the exercise in qualitative analysis. The mixture is to be submitted to a thorough systematic examination; its constituents are to be detected, and all other substances proved absent.

Students' applications for portions of the mixture will be received up to Wednesday morning, February 26, and the samples will be forwarded immediately.

Students' reports will be received up to Saturday morning, March 8. Each report should contain a concise account of the work done, and should include a list of the constituents detected, distinguishing any which may be regarded as accidental impurities.

## REPORTS.

The subject of the last exercise in qualitative analysis was a mixture consisting of 9 parts of mercuric chloride and 1 part of ammonium bromide.

The calculated composition of this mixture was:—

Hg	..	..	..	..	..	66.42
NH <sub>4</sub>	..	..	..	..	..	1.84
Cl	..	..	..	..	..	23.58
Br	..	..	..	..	..	8.16
						100.00

Last month we had occasion to call attention to the fact that the constituents of the mixture of sodium pyroborate and magnesium sulphate had been detected by almost every one of our correspondents. The constituents present in smallest quantity in this mixture were magnesium, 1.95 per cent., and the sulphuric radicle, 7.81 per cent. On the present occasion we have a mixture containing 1.84 per cent. of ammonium, which was detected by only four students, and 8.16 per cent. of bromine, which but one of our correspondents succeeded in detecting. The other constituents were present in quantity, and were detected by every one, with one exception in the case of chlorine.

It is clear that this proved too difficult an exercise for most of our contributors. The detection of the bromine did not present any serious difficulty, inasmuch as the ordinary methods of operation gave clear and satisfactory results. But these methods must be employed intelligently, and they require some skill. When silver nitrate was added to an aqueous solution of the mixture there was a copious precipitate; on testing the solubility of this precipitate in nitric acid it was found not to dissolve, but on treating it with ammonia the greater part dissolved immediately, leaving a distinctly yellow residue, which was difficultly soluble in ammonia. This pointed at once to the presence of chlorine, and the probable presence of either iodine or bromine. To another portion of the aqueous solution a little starch paste was added and a few drops of chloroform. Chlorine water was now added, drop by drop, and the liquid agitated after each addition, to bring the chloroform into more intimate contact with the solution. It was presently found that the chloroform had acquired a brown colour, without any perceptible blue tint being imparted to the starch. Bromine was thus shown to be present and iodine absent. The chlorine should be added until it is in excess,

but if at once added in excess there is risk of producing a compound of the bromine with the chlorine, which would prevent its recognition.

The detection of the ammonium was a more difficult problem. The volatility of the mixture pointed to the absence of a number of metallic radicles, and the possible presence of comparatively few, amongst which was ammonium. But on applying the ordinary tests, none but the faintest indications of ammonium could be observed. It required sensitive test-paper to detect the trace of ammonia that was evolved when a portion of the mixture was boiled with a solution of caustic potash. The calcium hydrate test gave no better result. It occurred to one of our correspondents—the student who obtained the first prize—to see if anything separated when the original mixture was treated with ether. Knowing that mercuric chloride was present, and that it was soluble in ether, it was possible that something not soluble in ether might be contained in the mixture that might be separated in this way. The result was quite satisfactory, and the ammonium bromide was separated with but little admixture of mercuric chloride, and it gave the usual reactions without any trouble. Another method which gave good results was to examine the filtrate from the sulphuretted hydrogen precipitate; this being free from mercury, its examination for ammonium presented no difficulty.

Some students will say that there is nothing in their textbooks about the interference of mercury in the detection of ammonium. This is quite true, and we must plead guilty of having given an exercise of unusual difficulty; but the fact which this exercise so clearly brings to light is worth knowing, and this must be our excuse for the trouble we have given our correspondents this time.

## PRIZES.

The First Prize for the best analysis has been awarded to A. L. DORAN, 1 Goldsmith Terrace, Bray, co. Wicklow.

The Second Prize has been awarded to P. H. BURTON, 397 Cambridge Road, N.E.

## Marks Awarded for Analyses:

A. L. Doran (1st prize)	..	..	90	H. G. Woodliffe	..	..	50
P. H. Burton	..	..	83	Oxford	..	..	50
Nosreap	..	..	85	Haron	..	..	50
Repoee	..	..	82	Peter	..	..	50
H. W. Colley	..	..	70	Ert	..	..	48
H. Bowden	..	..	65	Faba	..	..	45
F. English	..	..	60	S. H. Tootle	..	..	45
F. H. B.	..	..	60	C. Birch	..	..	45
W. B. Bell	..	..	60	Carbo Ligni	..	..	45
Nurret	..	..	55	Danwer	..	..	45
T. Guttridge	..	..	55	Dexter	..	..	42
Saponis	..	..	55	Argol	..	..	40
Ajax	..	..	55	Silver	..	..	40
W. H. Goy	..	..	55	W. L.	..	..	38
Gwilym	..	..	55	F. W. Fowan	..	..	40
A. Shaw	..	..	53	A. P.	..	..	35
A. Howard	..	..	53				

## TO CORRESPONDENTS.

**Prizes.**—The students to whom prizes are awarded are requested to write at once to the Publisher, naming the book they select, and stating how they wish it forwarded.

Any scientific book that is published at a price not greatly exceeding half-a-guinea may be taken as a first prize.

Any scientific book which is sold for about five shillings may be taken as second prize.

••• All communications should include the names and addresses of the writers.

P. H. BURTON.—The way in which your report was drawn was quite satisfactory.

H. BOWDEN.—You deserved better success, as your work seems to have been done with care; but this exercise presented unusual difficulties.



F. ENGLISH.—The presence of potassium was not compatible with the complete volatility of the mixture.

W. B. BELL.—If arsenic had been present it would have been recovered from the ammonium sulphide solution in the form of tersulphide, which is of a bright yellow colour. The precipitate you obtained on adding an excess of hydrochloric acid to the ammonium sulphide was white, showing that it consisted of sulphur only.

NURRET.—If ferric chloride had been present the mixture would not have been white, nor would it have yielded a colourless solution when dissolved in water.

AJAX.—The fact that the mixture was readily soluble in water, and that this solution gave no precipitate on dilution, made the presence of bismuth most improbable.

GWILYM.—If you had continued the heating of the mixture a little longer, you would have found that it was completely volatile, and therefore could not have contained a salt of sodium.

A. SHAW.—The aqueous solution of mercuric chloride reddens litmus-paper. If boracic acid had been present you ought to have been able to obtain the reaction with turmeric paper and the green coloration of the alcohol flame.

A. HOWARD.—When heated with sulphuric acid the mixture evolved hydrochloric and hydrobromic acids in small quantity, the mercuric compounds being for the most part volatilised unchanged. Various irritating odours are frequently mistaken for acetic acid, but if compared directly with the smell of acetic there is not much risk of error.

OXFORD.—The change which you observed in the colour of the precipitate produced by sulphuretted hydrogen is characteristic of mercury. If arsenic had been present, you ought to have been able to separate it from this precipitate, and to identify it.

ERR.—You had almost detected the bromine; with a little more care you would probably have recognised it. You did not completely separate the mercury by means of sulphuretted hydrogen.

FABA.—The transient green coloration which the mixture gave to the Bunsen flame was not in the least suggestive of potassium. Moreover, as the mixture was completely volatile, a potassium salt could not be present.

C. BIRCH.—If a citrate had been present, the mixture would have carbonised when heated.

DANWER.—It is worth while to prepare a solution of mercuric chloride, and pass sulphuretted hydrogen through it, to observe the very characteristic transition of colour of the precipitate from white to black. The colour which you describe as yellow was one of the stages of this transition.

ARGOL.—The presence of a sulphide along with a mercuric compound is not consistent with the white colour of the mixture and its solubility in water.

SILVER.—If the mixture contained a carbonate, its aqueous solution would have effervesced on the addition of hydrochloric acid.

W. L.—If the mixture had the composition you assigned to it, it would not have been volatile and soluble in water.

F. W. LOWAN.—We did not observe the slightest trace of blackening when the mixture was heated with strong sulphuric acid, nor was the odour evolved at all like that of burnt sugar.

A. P.—Your report was too condensed. Heated on platinum foil or in a porcelain dish, the mixture volatilised completely. This fact disposes of several of the substances you detected.

## Metropolitan Reports.

THE COUNTY COUNCIL'S CHEMIST.—At the weekly meeting of the London County Council, held at the Guildhall on Tuesday, the Council Chamber and Offices Committee reported that the chemist had complained that the rooms allotted to him at No. 8 Spring Gardens were unsuited for a chemical laboratory, and that moreover he would shortly require more room in order to efficiently carry out analytical operations in connection with the food supplies to the asylums. He also called attention to the necessity for an experimental photometer room, as important questions on that subject were constantly arising, and at present his apparatus was, owing to want of space, stowed away. Under the circumstances, the committee thought it absolutely necessary that additional premises should be taken to meet these pressing requirements. They recommended that the premises No. 40 Craven Street be taken for 13 years at a rent of 220*l.* per annum and a premium of 250*l.*, with the option of determining the lease at the expiration of 6 years; and that the solicitor be instructed to complete the arrangements. On the motion of Sir Walter de Souza, chairman of the committee, the report was adopted.

THEFTS FROM A WHOLESALE DEALER.—At Marlborough Street Police Court on February 14, Joseph Davidson (41), packer, Burton Street, Euston Road, and Joseph Rouselle (55), dealer, Westmoreland Street, Marylebone, were charged on remand, the former with stealing three bottles of sauce of the value of 5*s.*, belonging to Messrs. Crosse & Blackwell, of Soho Square, and the latter with receiving the same knowing them to have been stolen. The evidence showed that the prisoner Davidson had been in the employ of Messrs. Crosse & Blackwell for about seventeen years. On February 6 he was followed to a public-house in Hanway Street, where he met the prisoner Rouselle. Davidson handed three bottles of sauce to Rouselle, who put them into a bag. Subsequently the accused were arrested, and at Rouselle's lodgings were found seventeen bottles of Harvey's sauce, twenty-four bottles of Burgess's anchovy paste, nine bottles of quinine pills, a tin of *pâte de foie gras*, and other articles. Mr. Frederic William Moore, manager to Messrs. Lyle & Co., Italian warehousemen, Old Bond Street, deposed that he had known Rouselle for about two or three years, and was in the habit of buying sauces from him over the counter for ready money. He had bought goods from Rouselle slightly under cost price. Only on one occasion did he purchase from him anything bearing the label of Messrs. Crosse & Blackwell, and then the witness communicated on the subject with Messrs. Crosse & Blackwell. Rouselle represented to the witness that he was a dealer in sauces, and that he attended auctions, and was thus enabled to buy the goods at a cheap rate. The prisoners were committed for trial.

## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.*

### BIRMINGHAM.

"OPTICAL ILLUSIONS" was the title of a paper read by Mr. F. J. Liverseege at a meeting of the Midland Counties Chemists' Association on Tuesday evening. There was nothing in the paper directly bearing upon pharmacy, but it was attentively listened to by the members, who appreciated it and thanked the author.

A CHEMIST SUMMONED FOR ASSAULT.—At the Balsall Heath police court, Birmingham, on Friday of last week, Frederick Barlow, chemist, Balsall Heath Road, was summoned for assaulting Walter Knight, an agent, while by a cross-summons Knight was also summoned for assaulting Mr. Barlow. The case was not gone into before the magistrates, for when it came on, the summonses were withdrawn on both sides, as it was said proceedings were to be taken in the county court instead.

THE ADULTERATION OF DRUGS.—At the magistrates' court on February 14, before Messrs. Brame and Ryland, George Horton, chemist, of 79 Newtown Row, was summoned at the instance of the health department of the corporation on a charge of having sold sal volatile of less than the requisite strength. The defendant was represented by Mr. H. Glaisyer. Inspector Parker deposed to having purchased 3 oz. of sal volatile from defendant's shop on January 16. He submitted a sample to the city analyst, and his certificate showed that it was 37 per cent. below the strength prescribed by the British Pharmacopœia. Mr. Glaisyer, in defence, said Mr. Horton was in London, and the inspector was served by his assistant. The drug in question was a household drug, and was in existence long before the British Pharmacopœia prescribed a certain strength and quality. The substance was a preparation of aromatic solution of ammonia, which had several different degrees of strength and quality, but the general term of sal volatile was popularly applied to all. If the inspector had asked for sal volatile of the British Pharmacopœia he would have received it. The bench considered the offence proved, and fined defendant 60*s.* and costs, and in default one month's imprisonment.—Alfred H. Foster, druggist, 80 Navigation Street, was also summoned. Mr. Montgomery Hooper defended. Inspector



Parker stated that he visited defendant's shop on January 13, and purchased a sample of saffron. He submitted a portion of it to the city analyst, whose certificate showed that 19 per cent. was calendula florets, dyed the same colour as the genuine article. In cross-examination witness said he could not say what saffron was, and did not think he was obliged to answer the question. He believed that saffron was grown in France and Spain, and that it was picked by hand, but would not say that it was likely the calendula florets would be picked with the saffron, and the difference between them not discovered. The substances might be mixed in growth the same as corn and poppies. He did not know whether the soil would be likely to throw up a spurious substance. Mr. Brame here remarked that the florets were dyed. Witness: It was likely the florets would be contained in the saffron when brought to the country. When he bought the stuff defendant told him that he sold it exactly the same as he bought it. Mr. Hooper, for the defence, said he would not deny that calendula florets were in the sample, but suggested that they got there before it came to this country. He called Mr. Foster, who denied that the saffron was adulterated by him. A fine of 40s. and costs was imposed.—Walter Colley, druggist, 151 Sherlock Street, was summoned for selling saffron adulterated with calendula florets. Inspector Parker visited the shop of defendant on January 13, and purchased a sample of saffron. The city analyst's certificate showed that it was adulterated with 18 per cent. of calendula florets. Defendant was fined 40s. and costs.

#### LIVERPOOL.

**PHARMACEUTICAL STUDENTS' SOCIETY.**—On Monday, February 24, Dr. George Tate, F.I.C., F.C.A., will deliver a lecture in the Society's rooms, Colquitt Street, on "The Chemistry of the Yeast Plant," illustrated by microscopic objects. Chair to be taken at 8.30.

**CHEMISTS' ASSOCIATION.**—There was little business at the last meeting beyond the president's address. Mr. Parkinson mentioned a somewhat intractable mixture which he had been required to dispense, consisting of antipyrin, quinine, decoction of aloes and water. Dr. Symes said if an attempt were made to get the quinine into solution, he could understand there being some difficulty, but there should be none if the powders were rubbed with the decoction of aloes and the water then added. Mr. Parkinson also endeavoured to get the president's opinion on the draft Pharmacy Bill, but the latter merely said that in looking over it he observed some good points, but it did not go far enough. The members would have an opportunity of discussing it at the next meeting. The annual dinner of the Association is announced for Thursday, March 6, at 8 P.M., at the Royal Restaurant, 19 Old Hall Street. Tickets, 5s. each, can be obtained from Mr. John Bain, honorary secretary, 122 Robson Street.

**MUMMIFIED CATS.**—A second consignment of about 10 tons of these cats arrived in Liverpool, and yielded a much higher price than the first—viz., 5*l.* 17*s.* 6*d.* per ton against 3*l.* 13*s.* 9*d.* This was probably due to the satisfactory results



of analyses—one sample yielding 36 and another 42 per cent. of tri-basic phosphate of lime and  $2\frac{1}{2}$  per cent. of nitrogen, equal to about 3 per cent. of ammonia. Two specimens examined by the writer were very perfect—a head and part of neck, with teeth well preserved, weighing  $3\frac{1}{2}$  oz.; fore-leg, with claws and hair in good condition, weighing  $1\frac{1}{2}$  oz. The other, a head and two paws, some-

what smaller. These are represented in the sketch. Mr. Hockin, chemist, Old Hall Street, bought a number of specimens and has them in his window on sale.

#### NEWCASTLE-ON-TYNE.

MR. USHER has disposed of his Westgate Road business to Mr. F. Phipps, who has brightened up the shop con-

siderably, and, basking in the friendly glare of the electric light from the Tyne Theatre across the road, his establishment shows well.

**THE CUTTING MANIA** has for the nonce shifted its centre of interest eastwards, and Byker residents are now met by the blaze of the simultaneous opening of two large drug stores. Messrs. Inman & Co. (Limited) have opened a branch; and Mr. F. Crossling, a native of this "canny toon," but now fresh from Aberdeen, gives them ready battle.

**MESSRS. BRADY & MARTIN** are about to erect on Pandon Dene a factory for pill, suppository, and bougie making, and other work. The new building is to be one of ample dimensions for an increasing trade. Messrs. Proctor, Son & Clague also find it necessary to take large warehouse-room in the rear of their Grey Street premises.

**THE INFLUENZA BOOM.**—Many drug firms in this city have been sorely taxed to get through the plethora of orders which the unhealthy time through which we have just passed has brought to them; and between work, worry, and influenza, many have been laid up. The medical profession has been, however, much worse off, and, despite the advantages of the College of Medicine in providing advanced students, the supply of *locum tenens* has been so inadequate that patients and doctors alike suffered.

**WARNING.**—We are requested by the Mayor of Morpeth (Mr. F. E. Schofield) to warn the chemists in the North of England against a person who, under pretence of being his nephew, has already succeeded in defrauding several out of various sums. Newcastle has hitherto been the scene of his operations, but it is possible that he may extend them outside. In two or three cases that have come to light the name "William Fairley" has been given. If the young gentleman appears it is requested that he be promptly handed over to the police.

**ELECTRIC LIGHTING OF SHOPS** has made rapid strides during the past three weeks, and the companies have already had to set about enlarging the plant and buildings necessary for its production. The incandescent lamp reigns supreme in the city where Swan dwelt, and lamps of various designs, from 500 to 25 candle-power, are in use. One of the two companies is making a bold attempt in supplying at  $4\frac{1}{2}$  *d.* per unit, a figure much lower than has yet been attempted. The establishment of Messrs. Wilkin-son & Simpson, wholesale druggists, is now being fitted up under the supervision of the Gulcher Company.

**MESSRS. C. TENNANT & CO. (LIMITED)** have fortunately been able for the present to steer clear of a stoppage of their work through a labour dispute. An advance demanded by the men led to notices on both sides; but reason has prevailed, and the friendly arbitration of Dr. R. Spence Watson has been successful. No such happy solution has yet been found for the dispute in the Durham coal trade, and in a few days more the struggle may begin. The men's notices expire on Friday, and if the strike goes on incalculable harm will be done to many important industries, local and national.

#### SHEFFIELD.

**SHEFFIELD PHARMACEUTICAL AND CHEMICAL SOCIETY.**—A meeting of the registered chemists of Sheffield and district will be held on Friday, February 28, at 8.30 P.M., in the Society's rooms, to discuss the Pharmacy Acts Amendment Bill. A resolution will be moved by Mr. G. T. W. News-holme.

**A DOCTOR'S MISTAKE.**—An inquest was held at the Sheffield Union Workhouse, on Monday, on the bodies of three infants under five weeks old, the mothers of whom were inmates of the lying-in ward. The children all died in one day, after the administration of powders prescribed for them by Dr. Lewis Hunt, the medical officer of the house. Dr. Hunt, on examination, frankly admitted that the deaths were caused by an overdose of opium, due to a mistake on his part in writing his prescription. Intending to write 10 grains of Dover's powder divided into 20 packets, he unfortunately wrote 20 grains divided into 10 packets. The consequence of the mistake was that each of the powders contained a fifth instead of a twentieth part of a grain of opium, and the former quantity was an excessive dose for infants.



Dr. Hunt expressed his deep regret and pain at this misadventure. This was the first mistake he had made during the 14 years he had been medical officer, and at the time he wrote the prescription he was suffering himself from neuralgia of the stomach.—The jury returned a verdict of "Death from misadventure," and expressed their satisfaction with the manner in which Dr. Hunt accepted the entire responsibility for his mistake.

### IRELAND.

**A BANKRUPT CHEMIST.**—The bankruptcy is announced at Dublin of Mr. J. Stewart Stevenson, chemist, late of 73 Sir John Rogerson's Quay.

**PATIENT PATIENTS.**—"Yes," said the druggist, with conviction, "our wind pills are warranted to at once cure flatulency; several customers have used them regularly for the past twenty years, and could not do without them."

**MR. THOMAS MAYNE, M.P.,** chemist and wholesale photographic supplier, Dublin, has, says the *Freeman's Journal*, applied for the Chiltern Hundreds. His retirement from Parliament is due to private reasons.

**BAD MONEY.**—Dublin is at present suffering from an epidemic of spurious gold coins, chiefly Jubilee sovereigns. Two well-known city houses have ornamented their counters with two or three received last week.

**AN INSOLVENT UNION.**—The Kilrush Board of Guardians have been served with a writ at the suit of Messrs. Hunt & Co., chemists and druggists, Westland Row, Dublin, late medicine contractors to the union, to recover 248*l.* 1*l.* 5*d.* due to them for dishonoured cheques issued by the Board in payment of their account.

**THE ANNUAL MEETING OF THE DUBLIN BRANCH OF THE CHEMISTS' AND DRUGGISTS' ASSOCIATION.**—With a view of ensuring a good attendance at this meeting on Friday, February 28, many Dublin houses will close at 6 P.M. on the evening of that day.

**TENDERS.**—Tenders for a year's supply of drugs, medicines, and surgical appliances are invited by the authorities of the Carlow Union (February 27), by the vice-guardians of the Dungarvan Union (February 27), the latter embracing four dispensary districts, and by the guardians of the Belfast Union and dispensaries (February 25).

**DISPENSARY MEDICINES.**—Arising out of some letters lately published by the Irish press, in which complaint is made of the present dispensary system, pressure is about to be brought to bear on the Local Government Board to appoint one or two travelling pharmacists to make surprise visits to the outlying dispensaries, examine stocks of medicines, take samples for analysis, and keep the contracting druggists up to their tenders, thus ensuring properly-stocked compounding offices, as well as the receipt of drugs of the best quality.

**THE LATE SIR ROBERT KANE.**—The death occurred at Dublin on Sunday last, at the ripe age of 80, of Sir Robert Kane, who nearly half a century ago won a high position in the ranks of Irish scientists. The son of a Dublin chemist, his early experience in laboratory studies directed the course of his life work. He established the *Dublin Journal of Medical Science*, a publication designed by him to promote the study of chemistry and pharmacy, but subsequently had its scope enlarged. Chemical investigation possessed for him a fascination which bore fruit in his appointment of Professor of Chemistry to the Apothecaries' Hall of Ireland. His researches into the nature of the colouring-matter of lichens obtained for him the fellowship of the Royal Society, followed by the vice-regal knighthood. His "Elements of Chemistry," an elaborate, but now obsolete, work, was published in 1842. Previous to his appointment to the presidency of the Queen's College in Cork, he assisted in the formation of the Museum of Science, St. Stephen's Green, Dublin, of which he was the first director. A true type of the old-fashioned Conservative, Sir Robert Kane was popular with men of all shades of opinion, by whom his death is sincerely regretted.

### SCOTLAND.

#### DUNDEE.

**PRIZE ESSAYS.**—On Thursday, February 13, the members of the Chemists' Assistants' Association were entertained with essays written and read by Mr. C. T. Duncan (first), Mr. Fred. David (second), and Mr. James Fernie (third). It was expected that the essay on the Progress of Pharmacy, for which Messrs. Burroughs, Wellecome & Co. have offered a prize, would have been read; but, instead, the secretary read a telegram from Mr. J. Rutherford Hill, Edinburgh, who was making the selection, intimating his inability to forward the essays in time for the meeting. Thereafter, Mr. George Lunan (Messrs. James Robertson & Co., Edinburgh), who was present, was asked by the president (Mr. Forsyth) to address the meeting, and he did so with much acceptance.

Mr. W. G. Lamont, who for the last year has been principal assistant with Mr. Charles Kerr, pharmaceutical chemist, Nethergate, leaves shortly to take charge of the business of Mr. Hodgeton, pharmaceutical chemist, Brechin, a former employer.

#### EDINBURGH.

**A GENTLEMAN WAS HEARD TO REMARK** to a news-agent, the other day, that if he could not get *THE CHEMIST AND DRUGGIST* where he bought his other papers he would buy his other papers where he could get *THE CHEMIST AND DRUGGIST*. Possibly he did not invent the remark, but he used it effectively, and in a good cause.

**THE INFLUENZA EPIDEMIC** appears to have moved away from the modern Athens. Few cases have been reported during the last week. Many people, however, yet suffer from the effects of an attack. A reaction has set in as regards the consumption of medicines by the public. From the indiscriminate and general dosing of a few weeks ago, the practice of total abstinence would seem to be assumed; the consequence is that chemists say business is quiet at present.

**THE NEW PHARMACY ACTS AMENDMENT BILL** does not appear to give rise to much excitement here. So far it has been little mentioned; we have all become so much accustomed to regard the passing of any measure of the sort as remote—even should it ever occur—that there is, perhaps, some excuse for a little apathy. There is some regret that Scotland's only representative on the Council was unable to be present at the last Council meeting, as he is strongly interested in the proposed Bill, and his remarks in the discussion would have received great attention north of the Tweed.

#### GLASGOW.

**THE NEW PHARMACY BILL.**—The measure submitted at the last meeting of the Council, unless modified in certain particulars, will meet with strenuous opposition from the majority of Glasgow druggists. The compulsory curriculum of the Bill, although considered objectionable, is looked upon as innocuous, beside the section by which the right to dispense medical prescriptions is reserved exclusively to registered men. Nor is the alarm confined to the drug trade. Many Glasgow doctors who have shops are seriously disquieted at the prospect, for no one seems to know for certain how such an Act would affect them. Those who are old enough to remember the "seething controversies" which beset the passage of the Act of 1868 predict a recurrence of similar commotions, unless the Society is more communicative as to its intentions and conciliating in its tone than at present it seems disposed to be. The temper of the hour is best summed up in the phrase that if needs be, Glasgow will fight.

**FERRIC BROMIDE.**—It is almost impossible to keep a solution of ferric bromide pure. According to L. L. De Koninck, a solution containing excess of bromine begins to show the presence of a ferrous salt as soon as the excess of bromine has been expelled by boiling. Ferric bromide, free from bromine and from ferrous salt, can only be obtained by passing air through the solution in the cold. The excess of bromine is very tenaciously retained.



## General and Provincial News.

ACCORDING to the *Pharm. Zeit.* the Farbenfabriken, vorm. Fr. Bayer & Co., of Elberfeld, have just taken out trade-marks for two new preparations, called respectively "Losophan" and "Europhon," and patented a new process for the manufacture of benzenyl-ortho-amidotbiophenol. The firm of J. D. Riedel in Berlin have applied for a patent for the separation of ethylic ether from bromide of ethyl.

ARTIFICIAL COFFEE BEANS.—An enterprising firm of engineers in Cologne are now advertising machines for making the artificial coffee beans, to the introduction of which we referred some time ago. In their circular they point out that a mixture of 60 to 80 per cent. of the artificial with 10 to 20 per cent. of the genuine article has all the characteristics, to the eye, of pure roasted coffee beans. Samples of the "Kunstkaffee" are also offered.

ANOTHER CONVENTION.—The silk dyers in Crefeld, Lagenberg, Elberfeld and Barmen (Germany) have adopted a uniform and increased tariff for dyeing. To guard against an infringement of the combination, each member has deposited an accepted bill for 500%, which will be put in circulation against him if he breaks the agreement. The excuses for the increased tariff are the enhanced cost of dyeing materials, coal and wages.

A GERMAN PHARMACIST'S WILL.—The late Mr. Eduard Eschenbach, of Augsburg, in Bavaria, formerly a pharmacist in that place, has given legacies of 20,000 marks each to the local deaf and dumb asylum, the asylum for the blind, and the Ursberg asylum for *crétins*, 10,000 marks to the Sisters of Mercy, 3,000 marks each to the Catholic orphanage and the crèche, and 2,000 marks each to three associations for the care of the poor.

MISTAKING THE MEDICINE.—It is reported that John Daly, the dynamitard, who is now undergoing a life sentence at Chatham, has had a narrow escape from accidental poisoning. The doctor's assistant administered a dose of belladonna three times in mistake for medicine. Daly was suffering from blistered feet when the poison was administered, and he was at once sent into hospital, where he remained several days.

THE CASSIA LIGNEA OF INDO-CHINA.—The Annamese authorities have just extended a further concession to the French by granting them the monopoly of the cinnamon (cassia) production in the provinces of Kwang-Nam and Kwang-Nai. There is an enormous export of cassia from Annam to China; in 1888 it amounted to 500,000 kilogrammes. The Chinese have been in the habit of buying it in Annam, and selling it at an enormous profit at Hong Kong.

CARBOLIC POISONING.—On Wednesday, February 12, a boy named Jonathan Dyson, aged two years, the son of a bricklayer, of Stanington, near Sheffield, came to a very shocking death. As scarlet fever prevails in the district, Mr. Dyson had his house disinfected by placing carbolic acid in saucers on the floors of all the rooms. On Tuesday the deceased took up one of these saucers and swallowed the contents. Dr. Gyte was summoned and attended to the child, but it died within a few hours of the occurrence.

ACCIDENT TO A CHEMIST.—A serious accident occurred to Mr. Silk, chemist, of Teignmouth, and his servant on Friday, February 14. Mr. Silk heard screams issuing from the kitchen, and on proceeding thither saw the servant, enveloped in flames, rushing into the court. He forced her into the kitchen and, throwing some woollen clothing over her, succeeded in extinguishing the flames, but not before the girl was seriously burned. Mr. Silk also injured both his hands. The girl's clothes had become ignited through coming into contact with the kitchen range.

SEE TO YOUR GOLD.—An Order in Council has been published, extending until March 31 the time for tendering light gold coins for exchange, under the provisions of the Act of last year. The mode of exchange is also varied, and it is now provided that coins may be tendered during business hours at the Bank of England in London, and shall there be

left for such time prior to the exchange or payment as may be reasonably necessary for examination and weighing, in order to ascertain whether any coin has been illegally dealt with.

DEATH FROM PHOSPHORUS POISONING.—On Saturday last an inquest was held at the Royal Kent Dispensary, Greenwich, on the body of John Thomas Diaper, 21, who died at the Miller Hospital on the previous Wednesday, apparently from phosphorus poisoning. The post-mortem examination confirmed the fact. Police-constable Hayward said he found that the deceased purchased a pot of phosphorus paste, price one penny, which could be obtained at any oil-man's. The jury returned a verdict of "Suicide while suffering under mental derangement."

THE RIGHT OF FISHING FOR AMBER in the waters of the Kurisches Haff, on the north-east coast of Prussia, will be disposed of by tender on December 1 next for the period of eleven years. The finest amber is found in these waters, and the firm of Stantien & Becker, of Königsberg, the present lessees, are said to have every reason for satisfaction with the contract they made in 1880. Since then the amber-yielding area of the waters of the "Haff" has been largely extended. Competitors for the lease must be able to show that they possess a capital of not less than one million marks, and the minimum annual payment is fixed at 200,000 marks.

THE HOURS OF LABOUR IN THE ALKALI TRADE.—A few months ago the alkali workers of Northwich, Sandbach, and Wheelock obtained, by negotiations with Messrs. Brunner, Mond & Co., a reduction of three hours of labour by the alteration of their working arrangements from two shifts of twelve hours each to three shifts of eight hours each. The change has been felt by the men to be a great benefit, the reduction of hours being only accompanied by a very small reduction in wages. The salt workers, who were not included in the arrangement, have since been negotiating for a somewhat similar reduction, and the directors of Messrs. Brunner, Mond & Co., have recently conceded this demand.

THE CHEMISTS' ASSISTANTS' ASSOCIATION.—We are asked to announce that the annual dinner of this association will be held at the Holborn Restaurant on Thursday, March 6, at 8 P.M., when Dr. A. P. Luff, B.Sc., F.I.C., F.C.S., will preside, supported by Sir Edward Sieveking, M.D., F.R.S., and the President of the Pharmaceutical Society. Tickets may be obtained from any of the officers of the association, from the town representatives of the wholesale houses connected with pharmacy, or from Mr. F. Ashley Rogers, honorary secretary dinner committee, 29 Chapel Street, Belgrave Square, S.W. The next meeting of the association will be held on Thursday, February 27, when a paper will be read by Mr. W. L. Williams, A.I.C., on "The polariscope and its applications in pharmacy."

THE PARIS MARKET FOR COLZA OIL has been disturbed by the discovery of extensive frauds by the owner of a great bonding warehouse at Saiut-Ouen, in the environs, named Dumont. He is charged with creating fictitious warrants, and making false declarations as to the stock of oil in his warehouses. The warrants in circulation represent a total of 8,000 tons of oil, and his returns showed a stock of 5,200 tons, while the real quantity held by him is only 750 tons. The frauds were first suspected by a bank, the Sous-Comptoir du Commerce, which had made advances on warrants, and was surprised at the number in circulation. The bank demanded verification of the stock, and on the refusal of M. Dumont addressed a complaint to the judicial authorities. The deficit represents a value of six million francs.

THE NEW WEIGHTS AND MEASURES ACT.—An unexpected difficulty has arisen in the working of the new Weights and Measures Act. By the wording of one of its clauses it is enacted that "The Board of Trade shall provide for the holding of examinations for the purpose of ascertaining whether persons acting or appointed to act as inspectors of weights and measures possess sufficient practical knowledge for the proper performance of their duties." Thus it is found to be necessary, in order to comply with the Act, that men shall be appointed inspectors before they can offer themselves for examination; and when they do offer them-



selves, of course they may fail. But though the new law provides for the examination of those only who are actually appointed inspectors, it expressly forbids their acting as such until they have obtained certificates.

**URANIUM.**—The *Times*, again referring to the uranium mines at Grampound Road, Cornwall, states that the result of experimental operations conducted in London is that the uranium ore after treatment yields the yellow sesqui-oxide, which is employed in glass manufacture to produce the golden colour and, in conjunction with other minerals, opalescent tints. The uranium occurs in this form in the ore to the extent, it is said, of from 18 to 29 per cent. The yield of metal at the works is about 18 per cent. from the lode near the surface which is now being worked. The market price of the metal is about 2,000*l.* per ton. It is proposed to substitute the metal for gold in electro-plating, for which purpose it is well adapted. Possessing, as it does, a high electrical resistance, it is also expected to prove very useful in electric light installations. The present works are capable of turning out about half a ton of uranium per week.

**FIRES.**—A fire occurred at the shop of Mr. J. Haden, chemist, 162, Conybere Street, Birmingham, on the 13th inst., but was subdued before much damage was done. —Early on the evening of February 18 a fire broke out in the general store of the North British Chemical Company's works, which are situated on the banks of the Forth and Clyde Canal. An alarm was at once given, and the fire-brigade was promptly in attendance. Considerable alarm was at first felt regarding the general store, as it was known that a quantity of oil, waste, and other inflammable stuffs were contained in it; but the efforts of the firemen were successful in confining it to the store, which was literally gutted out. The firemen received much assistance from several of the workmen. The fire was got under by nine o'clock. The full extent of the damage is not known, but is believed to be covered by insurance.

**CHEMIST'S ASSISTANT CHARGED WITH SLANDER.**—The defendant in this case was a young man of the name of Northwood, son-in-law of Mr. Price, chemist, of Barking and Shadwell, and resided at the branch shop at Barking, where the plaintiff, Mrs. Mary Ann Bedding, acted as house-keeper. The case, as stated by the plaintiff, was that on June 26 last the defendant arrived at the house with Mrs. Price, and the plaintiff was discharged, being paid, in addition to what wages were due to her, a month's wages in lieu of notice. The same afternoon the defendant saw a Mr. Collier, who acted as Mr. Price's assistant at another shop of his in Shadwell, and said to him that "the plaintiff had been continually muddled and in a state of intoxication, and was then in delirium tremens." The plaintiff in evidence denied that she had ever been muddled with drink or intoxicated, and stated that she was perfectly sober the day she left; hence the present action. The defendant on being called stated that on the day in question the plaintiff was violent and abusive, and, in his opinion, drunk, and he discharged her, at the same time telling her what for. As she declined to go without more money than he considered due to her, he sent the boy for a policeman, and two sergeants of police came. He had mentioned to Collier that he discharged the plaintiff for being drunk, and that he had on occasions seen her muddled, but he never suggested that she had delirium tremens. Police-sergeants Gartrell and Sayward having stated that when called in they found the plaintiff worse for drink, and shouting. Mr. Justice Stephen summed up, and the jury found a verdict for the defendant.

**EXPERIMENTS** made by Dr. M. N. Gréban upon dogs with amygdalin and emulsin successively injected into the veins prove that hydrocyanic kills by arresting the respiration, which result occurs before the heart is affected.

**PHENACETIN** gives, according to J. Lüttke, a red colour when boiled with hydrochloric acid with the addition of a little ferric chloride. This is the best test for its identity. The purity tests most reliable are its solubility in spirit, acetic acid, and hot water, in all of which it should form a clear solution. If it is pure, phenacetin gives no colour with a mixture of bleaching powder and hydrochloric acid.

## Pharmaceutical Society of Great Britain.

### NORTH BRITISH BRANCH.

**A**N evening meeting was held at 36 York Place, Edinburgh, on Wednesday at half-past eight o'clock. In the absence of Mr. William Gilmour, chairman of the branch, who is convalescent from a rather severe illness, Mr. John Nesbit occupied the chair. The first paper read was on

### NOTES ON SOME GUM SAMPLES,

By T. Maben.

This paper, which did not profess to be exhaustive, consisted of a series of notes—chemical, pharmaceutical, and commercial—on some samples of acacia and other gums. For information and assistance the author expressed his indebtedness to Mr. E. M. Holmes, Mr. Jackson, A.L.S., and Mr. Hillier, of Kew, and especially to Mr. A. C. Meyjes, of *THE CHEMIST AND DRUGGIST*, who had supplied most of the samples, as well as valuable commercial notes regarding them. There were twenty-one samples in all, and they comprised Egyptian, East Indian, West African, Cape, Australian, and Brazilian gums. Commencing with a sample of picked Kordofan gum, which showed the characters of the best acacia gum, Mr. Maben gave a short historical notice of the course of trade in this commodity during the past few years, and then referred briefly to Geddah gum, Aden gum, and Gehzirah and Talca gums. Two samples of Senegal gum ("gomme du Bas du Fleuve" and "gomme de Galam") were shown and described, and an account was given of the gum trade on the Senegal river. This trade is entirely in the hands of the French, and some few years ago the Bordeaux merchants formed a syndicate for the control of the article, and succeeded in forcing up the price from 52*s.* 6*d.* per cwt. in January, 1885, to 125*s.* in April, 1888. Since that time there has been a gradually slackening demand, and in the last market report of *THE CHEMIST AND DRUGGIST* (February 15) it was stated "that there has been a serious decline in the price of Senegal gums, both varieties being easily obtainable at 85*s.* per cwt." Many of the so-called Arabian gums now met with were said to consist of a large admixture of Senegal gum.

There were shown three samples of Barbary or Mogadoro-gum. White Barbary, the best variety of the three, is not unlike Turkey sorts, but is rather dirtier. It is perfectly soluble in water, gives a bright transparent mucilage, free from odour, and keeping well. This white gum is an import of rather recent date, and is thought by some to be a Soudan gum, which now finds its way by a diverted route to the North-West instead of the North-East of Africa. Five samples of East Indian Amrad gums were shown. These have already been described by Mander, and were only briefly referred to. Special attention was drawn to Cape gum, of which three samples were shown. Two varieties of this gum are imported—one the hard brown Cape, which is obtained from *Acacia horrida*. This has been known for many years, and is described in *Pharmacographia*; but more recently, since the closing of the Soudan, another variety has been regularly consigned to the London markets. This is "soft white Cape," which is supposed to be gathered in the Northern parts of Cape Colony, beyond the Orange river. A sample of fine picked white Cape showed as fine an appearance as any Kordofan gum, and so like is this to the old Turkey gums that it is thought by some that the white Cape is simply what we formerly received from the Soudan, and which is now brought by Arab traders right across Africa. This is a doubtful hypothesis, however, for if gums found their way so far South we would surely receive some by way of Zanzibar. Australian gum was next touched upon. This gum gives a thin mucilage, which on standing separates, a brownish deposit settling down, with a pale clear supernatant mucilage. The pure gum contains no tannin, but associated with it are pieces of wood, which impart a trace of tannin unless they are removed. The market for Australian gum is limited in this country, but it is said to be employed to a considerable extent in Russia and Sweden. Three samples of Brazilian gum were shown, one of which was sent to Mr. Maben by Mr. E. M. Holmes, from the



museum at Bloomsbury Square. This gum occurs in large dark-amber or dark-brown glassy drops, and is soluble in water. The mucilage made from it is thick, but only moderately adhesive. Ghatti gum was described, and Mr. Mander and Mr. Prebble were quoted for information regarding it. The author did not regard Ghatti gum with so much favour as Mr. Mander, chiefly owing to the disagreeable mawkish flavour, which he thought would prove an obstacle to its general employment in pharmacy. Oomra gum, or, according to Prebble, "Babool gum," was shown. This gum gives a dark-coloured adhesive viscid mucilage, which for many purposes might be useful. Referring to the relative value of the different gums for pharmaceutical purposes, the author said that the dark-coloured gums, or gums which gave a dark-coloured mucilage, might be at once dismissed from their notice, for, however valuable many of them might be in the arts, or for the purposes of the confectioner, it was obvious that they were unsuitable in pharmacy. There remained not very many to pass an opinion upon, and these he was disposed to place in this order:—Cape gum, Senegal gum, Barbary gum, the paler varieties of E. I. Amrad gums, and Ghatti gum. All of these possessed good emulsifying properties, and gave a clear good-keeping mucilage. A summary of the transactions in gum recorded in THE CHEMIST AND DRUGGIST market reports was given. According to this there had been sold during the last few months:—

		£ s. d.	£ s. d.
Brazilian gum .. ..	at from	1 8 0	3 0 0 per cwt.
Aden gum, scented ..	"	1 10 0	3 0 0 "
" " unscented ..	"	3 0 0	4 10 0 "
Oomra gum .. ..	"	2 0 0	2 19 0 "
Australian gum ..	"	1 5 0	3 4 0 "
Ghatti " .. ..	"	1 8 0	4 14 0 "
Gedda and Talca ..	"	4 5 0	4 15 0 "
Amrad gums .. ..	"	2 0 0	5 5 0 "
Cape " .. ..	"	2 0 0	5 5 0 "
Barbary or Mogadore gums	"	2 2 0	5 12 6 "
Senegal gum .. ..	"	4 2 6	5 15 0 "
Turkey " .. ..	"	5 0 0	16 10 0 "

In addition to these, parcels of Cape gum have been sold for 14*l.* 10*s.*, and Mogadore for 14*l.* 5*s.*, while 25*l.* per cwt. was asked for a parcel of fine Turkey.

The reactions of the various mucilages were gone into. All the samples gave precipitates with alcohol and ammonium oxalate, although with the latter Brazilian and Australian gums gave only faint reactions. With borax, acacia mucilage hardened into a gummy mass; similarly with basic lead and ferric chloride, while it gelatinised and formed a softer mass with silicate of potash. Generally speaking, similar reactions were obtained with Senegal gums, the E. I. Amrad gums, white Barbary, the Cape gums, and Gedda gum. Barbary brown and Amrad give only a jelly with borax. Australian gum has no reaction with ferric chloride and potassic silicate; Brazilian gum has no reaction with potassic silicate, but gelatinises with borax and ferric chloride, and slightly with basic lead. Ghatti gum gelatinises with all four, but only slightly with potassic silicate. Oomra gum reacts similarly to acacia, except that it is entirely unaffected by basic lead, and forms a softer jelly with ferric chloride.

The Chairman thought the communication was a very interesting one. Mr. Boa was inclined, from experience, to rank Ghatti gum as higher than Mr. Maben had placed it.

The next paper was on

#### THE DETECTION AND SEPARATION OF SODIUM FROM LITHIUM.

By Isaac W. Thomson.

The author said that there was no absolutely accurate process adapted for common application. He had found sodium chloride to be soluble in strong hydrochloric acid to the extent of 1 in 600 only, while lithium chloride was very soluble, and thought that advantage might be taken of this difference in property to separate sodium from lithium salts. As an example, 10 grammes of lithium carbonate, containing

2 per cent. of sodium carbonate, was put into a flask with 100 c.c. of water, and, the gross weight having been noted, the contents of the flask were brought to the boil, made up to the original weight with water, and 50 c.c. taken out. After filtration, this separated portion was evaporated to dryness, and treated with 15 c.c. of strong hydrochloric acid saturated with sodium chloride, cooled, thrown on a filter, washed with 10 c.c. of the same acid, and finally with pure acid. The residue was dissolved in water, and the solution, evaporated to dryness, gave a residue of sodium chloride weighing 0.11 gramme, which was practically equal to 2 per cent. of carbonate. Mr. Thomson made comparative estimations with alcohol and ether, which corroborated the hydrochloric acid result. The presence of sulphate, he ascertained, did not interfere with the method, as it did in the case of the alcohol and ether process.

In the discussion on the paper the Chairman said he generally trusted to the saturating power of the carbonate. Mr. Dott said the test seemed to be a valuable one, and pointed out that for the qualitative determination of small admixtures of sodium the spectroscope gave the best results. Mr. Gibson also spoke well of the hydrochloric-acid process.

Mr. Thomson also communicated a note on a simple process for

#### ESTIMATING THE ACIDITY OF MILK.

This was an important note to farmers who send milk into large towns, and who are accustomed to add bicarbonate of sodium to it in order to neutralise the free acid. They do this in a rule-of-thumb way, and it was in order to give a simple and fairly exact method of computing the quantity of soda which should be added that Mr. Thomson now brought forward his paper. He made a standardised solution of ammonia, 10 minims of which were equal to 1 grain of sodium bicarbonate. Phenolphthalein-paper was used as an indicator. The method is substantially as follows:—half a pint of milk and 20 minims of the standard solution are put into a test-can. The can is placed in hot water for a few minutes, a piece of the test-paper being fastened to the top of the lid. If the paper becomes pink too much ammonia has been added, and the experiment is repeated with 15 minims of the solution. It may not become pink in this case; if so, the neutral point lies between, and the farmer can calculate near enough for his purpose the amount of soda required to make the milk faintly alkaline. In commenting upon this communication, Mr. Boa said that he knew same dairy farmers, and he thought, from the trouble that the rule-of-thumb method was to them, that Mr. Thomson's suggestion would be very welcome to them.

#### OTHER COMMUNICATIONS.

Mr. William Lawson, of Bellshill, was down for a paper on "Adulterated Anise Fruit," which was read by Mr. J. R. Hill, the assistant secretary. The point of this was that he had bought a medical practitioner's stock, in which was some anise fruit containing 70 per cent. of starch in grains resembling anise. The assistant secretary cruelly emphasised that the sample was from a medical man's stock.—Mr. George Lunan next called attention to the fact that ammoniated tincture of quinine forms a clear solution with aerated waters. This, explained Mr. Isaac W. Thomson, is because the carbonic-acid gas dissolves the quinine or fixes the ammonia.—Mr. Hill showed how the igniting-point of sulphur could be determined. He made it out to be 250° C. He worked on a suggestion made in the last number of the *Chemical News*.

This was all the business, and before adjourning to the coffee-room the members were told that at the March meeting papers would be read by Mr. D. B. Dott and Mr. David Storror, of Kirkcaldy.

ANTIPYRIN has a wonderful influence in increasing the solubility of caffeine, as well as of the salts of quinine. In this respect it resembles the action of sodium benzoate and salicylate, which Tanret has already studied. Twenty grains of caffeine and 30 grains of antipyrin form a perfectly clear solution with sufficient water to make 1 fluid oz. The combination appears to be specially serviceable in the treatment of neuralgia and migraine.

\* This proposition was actually made in a paper which we received from Mr. W. H. Symons on January 5 last, and published in THE CHEMIST AND DRUGGIST of February 1. Mr. Thomson explained to the meeting that his own paper was written for a meeting in January.



## ARSENIC IN GLYCERINE.

AT the monthly meeting of the Manchester Pharmaceutical Association on February 12, Mr. W. Wilkinson, vice-president, in the chair, Mr. L. Siebold read an important paper, entitled, "A Further Note on Arsenic in Glycerine." His communication, he said, was to supplement a note on the same subject which he read before the Newcastle meeting of the British Pharmaceutical Conference. He then stated that he had experiments in progress with regard to the question whether or not bottle-glass containing arsenic would yield that impurity, or part of it, to glycerine stored in such bottles. From that time to now he had kept various kinds of bottles, made of arsenical glass, filled with perfectly pure glycerine, and had tested their contents at regular monthly intervals. No contamination had taken place in any instance. He felt satisfied, therefore, that glycerine did not extract arsenic from glass bottles. He had likewise convinced himself that the solder of the tins in which glycerine was stored was not answerable for this contamination, and had little doubt that the latter was wholly referable to the use of impure acids, sulphuric or hydrochloric, in the manufacture of commercial glycerines. As stated in his previous paper, there was no difficulty in obtaining glycerine entirely free from arsenic, the well-known steam-distillation process yielding a thoroughly satisfactory preparation. He might add that certain brands of glycerine which formerly contained objectionable proportions of this impurity were now quite free from it, whilst in certain others the proportion of arsenic was now reduced to an insignificant trace. With regard to the modification of Gntzeit's test for arsenic, which he recommended for testing glycerine, he wished to point out a precaution he found necessary to observe in connection with the use of iodine solution for the destruction of sulphur compounds. Any excess of iodine retarded the reaction, and if this excess should amount to more than a trace, it might seriously interfere with the proper working of the test, and lead to erroneous conclusions. He would, therefore, suggest that a few drops of freshly-made mucilage of starch be added to the mixture of glycerine and dilute hydrochloric acid, and that an exceedingly weak solution of iodine (about 0.1 gramme per litre) be then added drop by drop until the mixture showed a visible blue coloration. The mixture was then ready for the introduction of the zinc. In this way the destruction of sulphur compounds was completely attained without the risk attending the use of an appreciable excess of iodine; and the test under these circumstances was absolutely safe and trustworthy even in the hands of inexperienced manipulators. The purity of the reagents should, however, be ascertained by a blank experiment in every case. All further particulars with respect to this test would be found in the "Year-Book of Pharmacy," 1889, page 417. In dealing with this subject before the British Pharmaceutical Conference, he suggested that the test described might also be made the basis of a quantitative process. Since then he had had ample opportunities of satisfying himself that this process was admirably adapted for the purpose, and that minute traces of arsenic might be estimated by it with greater ease and precision than by other methods. In a recent dispute, whether a certain sample of glycerine sold as perfectly pure contained traces of arsenic or not he was able, by this process, to demonstrate the presence of 1 part of arsenious acid in 48,000 to 50,000 parts of the sample, or 16 grains per cwt. of glycerine. He knew of no other method equally applicable for the determination of such exceedingly minute proportions with anything like fair accuracy. He used a solution of 1 c.c. of liquor arsenici hydrochloricus B.P. in a litre of water, and of this he made additions of various proportions to definite weights of pure glycerine. All that was necessary was to ascertain which of these mixtures gave the same shade or depth of stain on the mercurial test-paper in exactly the same space of time, and under exactly equal conditions in all other respects, as the sample under examination. It was not advisable to work more than two tubes simultaneously, as otherwise it would be rather difficult to ensure absolute equality of conditions as to time. The treatment with iodine should be exactly

the same as recommended above for qualitative purposes. Above all, it was necessary that the proportions of glycerine, dilute acid, and zinc, as well as the manner of preparing the test-paper, should be absolutely the same in both cases. With due attention to these details, and a little practice, the test would be found as serviceable for the quantitative determination of these traces of arsenic as it was for their detection. A short discussion followed the reading of the paper, to the author of which the thanks of the association were accorded.

## HINTS FOR PHARMACISTS.

AT a meeting of the Glasgow Chemists' and Druggists' Assistants' Association on February 19, Mr. A. McKellar read a paper entitled "Useful Hints," the principal points of which are given in the subjoined abstract. The author said he could not claim originality for the observations set down in the paper, but it had occurred to him that some of the practical lessons learned in a varied and sometimes painful, but in the main wholesome, experience, might be of some little value to others at their daily work. Perhaps nothing occasioned more difficulty and vexation to the beginner in pharmacy than the apparently simple operation of

## CLEANSING MEASURES, &amp;c.

Therefore he would venture to make some suggestions in that connection. His list of detergents was not exhaustive, but he could answer for its trustworthiness.

Character of Stain, &c.	Solvent.
Aniline dyes, e.g. fuchsine, marking-ink, &c.	Sol. acid. tart.
Deposits in bottles from fluid magnesia	
Parrish's syrup, syr. Eastonii, &c.	Acid. hydrochlor.
Opium and cinchona preparations	
Tr. benzoin co. storax, and most vegetable mixtures	Liq. potassæ.
Tar, copaiba, tr. cannabis indicæ	Turpentine.
Old paint and grease stains on clothes	Chloroform.

For cleaning greasy ointment slabs nothing is equal to S.V.M. on cotton, followed by thorough washing with soap and water. The opaque film that occasionally forms in the water bottle, being chiefly of an organic nature, is at once removed by sulphuric acid, which also—diluted—instantaneously dissolves off the dirty scum so often found on opal pots, the process being attended by a very palpable evolution of  $H_2S$ . Two of the dirtiest bottles in every shop are those for liq. plumbi subacet. and tr. ferri perchlor. For the former strong acetic acid is recommended, but iodide of potassium in small quantity, forming iodide of lead, and subsequent rinsing out with ammonia, answers admirably; while for the latter, although hydrochloric acid helps, nothing but hard rubbing makes a good job. The dark stain left in a mortar in which Ethiops mineral has been made is only partially erased by hydrochloric acid, but a liberal application of elbow-grease and a piece of pumice-stone are needed to complete the renovation. The dimness observed in old liquor potassæ bottles being due, as was explained at the last Pharmaceutical Conference, to the chemical action of the alkali on the glass, is not removable. Greasy ointment pots are best treated with dry sawdust, and bone tallies, ink-stained and yellow, are converted into blanched blanks with the aid of dilute hydrochloric acid. For

## TAKING OFF SOILED LABELS

from customers' bottles—always a crucial test of a druggist's taste and conscientiousness in details—the most expeditious and effective plan is first to wet the label thoroughly, and then cautiously hold the bottle over a gas flame, when as a rule the label will peel off. In some high-class pharmacies a steam jet is used for this purpose, but the humbler method is quite as successful. Labels on liniment bottles, &c., are often so soaked with oil that when a repeat is wanted the prescription-book number is indecipherable; in that event rub label lightly with piece of cotton, then moisten with benzine, and dry above a gas flame, when in nine cases out of ten the figures will become



legible. These exhaust most of the commoner stains, and it only remains to add a few odds and ends.

#### A GOOD DESICCATOR

for pills, soft leaves, &c., can be devised by taking a Pears' soap-box, laying a few pieces of quicklime on the bottom, and resting a jujube tin, holding the substances to be dried, on the quicklime bed, the lid of the box being, of course, shut. Quicklime is likewise of great service in preserving books stored in a damp place, several small lumps, occasionally renewed, in a bookcase being an infallible protection to the books. For enamelled goods use Brooks's soap, and finally, if your apron string breaks off at an inopportune moment, take any button-shaped lozenge, wrap it in the corner of the apron, and tie the tape round it. This is a splendid makeshift, and gives the washerwoman a little innocent amusement, picking out the knot to discover what the knob contains.

#### CONCENTRATED INFUSIONS AND DECOCTIONS.

By CHARLES D. MOFFAT.

IN this paper, which was read before the Sheffield Pharmaceutical and Chemical Society, on Wednesday, February 12, the author, after a few introductory sentences, said that one of the commonest complaints against concentrated infusions was that it is impossible to get them, when diluted, to correspond with the official preparations in colour, taste, and smell, but he thought that with due care this fault can be remedied. It is obvious that the same process is not applicable in all cases. Still, many seem to think that because a certain infusion is prepared by pouring boiling water over the drug and macerating, therefore the concentrated preparation corresponding to it is necessarily made by pouring boiling water over eight times the quantity of drug, and evaporating down to the required volume. A little consideration will enable us to see that it is impossible to lay down one rule which is to be followed in all cases. It is only by a knowledge of the drug and its active constituents that we can hit upon the right method of procedure.

Another mistake is to judge the strength of a concentrated infusion by its colour. We have a good example of this in belladonna. If a liniment were to be prepared with a menstruum containing 20 or 25 per cent. of spirit, the colour would be almost black. We might thus be tempted to suppose that it was stronger than that prepared by the official method. As a matter of fact it is not nearly so strong, as the researches of Dunstan and Ransom go to show. As a rule it will be found that an infusion prepared with evaporation is much darker in colour than if prepared by either pressure or repercolation.

For most infusions the Pharmacopœia directs the use of boiling water. It will, however, be found that in the majority of cases cold water will answer all requirements as well, if not better, for the continued use of heat should be discountenanced as far as possible. It not only spoils the aroma of the preparation, but also impairs its keeping properties. Still, there are several cases in which a preliminary maceration with boiling water, followed by treatment with cold, is advantageous.

The three methods which give the best results are:—(1) Exhaustion with hot or cold water and evaporation; (2) Extraction by pressure, and (3) Repercolation.

I have selected three or four typical examples of each process, which I will now briefly allude to. In each of my calculations I have allowed for the use of 20 per cent. of spirit, not that this is necessarily the proper amount to use, but merely for convenience. Indeed, it will be found that some require more than others. The art of preserving infusions with a minimum of spirit is only known to a few wholesale houses, by whom it is naturally regarded as a trade secret.

As I have before remarked, the nature of the drug must be first carefully considered. For instance "extraction by pressure" would not answer with calumba on account of the starch and mucilage which it contains, causing it to clog. Again, evaporation would obviously prove harmful to such

aromatic drugs as cascarilla, matieo, and serpentary. The first method is

#### EXHAUSTION WITH COLD WATER AND EVAPORATION.

Let us take calumba as a type of this. Half a pound of the sliced root is macerated in 30 oz. of cold water for twenty-four hours. It is then strained, and  $\frac{1}{2}$  pint having been reserved and mixed with 4 oz. of rectified spirit, the remainder is evaporated in a water or steam-bath. Meanwhile the marc is again treated with water, and, after macerating for a few hours, is strained as before, the product being evaporated. This is continued until the drug is exhausted. It is then reduced to about 6 oz. and heated to the boiling-point, which coagulates albuminous matter, thus causing the infusion to filter more easily and also destroying traces of mould which may have formed during the process. Finally, it is added to the mixture of spirit and reserved portion, and made up to a pint if necessary. An infusion thus prepared, when diluted with seven times its volume of water, will compare favourably in every way to the fresh infusion.

Most infusions should be heated to the boiling-point, as above directed, but there are exceptions. The reason why a portion is reserved after the first maceration is that the aroma of the drug is thus preserved.

Quassia is also well adapted for this process, but the wood should not be by any means exhausted, or the infusion will be too bitter and too dark in colour. It is best in this case to boil the water before macerating the quassia in it, so as to prevent it becoming mouldy. One maceration of about forty-eight hours' duration will be found quite sufficient, and evaporation can usually be dispensed with altogether, it being only necessary to strain off the infusion and boil as in the case of calumba.

Under this heading we may also consider decoction of logwood, which contains cinnamon bark in addition to the astringent. In all cases wherein we have to deal with aromatic bodies, those in a bruised condition must be macerated for a few days in the spirit. We do so with the cinnamon in this case, meanwhile boiling the logwood with successive portions of water until it is exhausted, then evaporating in the ordinary way. When the decoction has been reduced to the required volume (16 oz., if a pint is being made) the tincture of cinnamon is thrown on a strainer and the marc washed with the decoction, water being added if necessary to make up to a pint. It is not necessary to boil this decoction, as it is one of the best keeping preparations of its class.

It is well to note that in all cases where an aromatic is present in an infusion or decoction, the strength of the spirituous menstruum must be that calculated to extract the essential oil best. Tinctura cinnamomi is prepared with rectified spirit, therefore we use the same menstruum in the case of the decoction just mentioned.

#### EXTRACTION BY PRESSURE.

Dr. Symes, in a paper communicated to the British Pharmaceutical Conference in 1888, stated that fluid extract of senna, prepared by this method, was much more active than that prepared by percolation and evaporation. His menstruum consisted of spirit and water in equal proportion, but he does not state whether the leaves were whole or in powder. A great deal depends on the latter condition for the successful use of the process in the preparation of infusion of senna.

It was found by experiment that if the powdered leaves were used, and a menstruum consisting wholly of water, or containing as much as 25 per cent. of spirit, the result was a failure as far as pressure was concerned, by reason of the mucilage causing the press-bag to clog. The following process will be found to yield excellent results:—

Macerate 448 grains of powdered ginger in 4 oz. of rectified spirit. Mix 1 lb. of senna leaves thoroughly with a pint of cold water. Allow this to macerate with occasional stirring for twenty-four hours, then press and set aside the product. Again mix the leaves with as much water as, if added to the first product, would yield 16 oz., and macerate for twelve hours. Again press, mix the two liquids, and wash the tincture of ginger with it, finally making up to a pint with water if necessary.

The advantages of this process are, that prolonged heat



which is extremely injurious to senna, is avoided, and the product, although somewhat lighter in colour than the ordinary article, possesses an aroma and appearance which are too often sought for in vain. Its therapeutic effects are also well marked. No difficulty will be experienced in the pressure of the whole leaves, since there is no tendency to clog. Although the senna may not be thus *completely* exhausted, still I claim for the process that it yields an article better in appearance, smell, and therapeutic activity than any other method which I am acquainted with. Complete exhaustion is not the only thing to be aimed at in making a concentrated infusion. The process may be with advantage adapted to syrup of senna.

My next example is buchu, for which I recommend the following method:—In making 1 pint, pour a pint of boiling water over  $\frac{1}{2}$  lb of the bruised leaves, macerating for twenty-four hours. Then press and set aside the product; macerate again, as in the case of senna, with boiling water for twelve hours, and again press and mix the two liquids. The product will be thick and mucilaginous.

There are now two alternatives. If you think that this mucilage from its demulcent action on the mucous membrane is a desirable constituent in the infusion, there is nothing more to do but to add the spirit and make up to quantity. But if you are of opinion that the medicinal virtue of buchu lies solely in its essential oil, and that the mucilage should be got rid of, the infusion should now be boiled, thereby precipitating all the mucilaginous matter, and it can then be easily filtered through flannel. The finished product is a perfectly bright and elegant preparation. Of course in the first case the spirit would also precipitate the mucilaginous and albuminous matter, but only slowly, and not so completely as boiling does.

My third example is rhubarb, one which gave me considerable trouble until I hit upon the "extraction by pressure" method. I had been accustomed to make it by infusing the roughly-powdered root with boiling water, followed by evaporation; but the product was very unsatisfactory, as it was liable to become mouldy with 20 per cent. of spirit, and, besides being very inelegant in appearance, would not filter.

By the pressure method 16 oz. of cold water is mixed with 4 oz. of the bruised root and macerated for twenty-four hours. The remainder of the process is similar to that of senna, but boiling must be omitted.

It will be noticed that here a large quantity of menstruum is used in proportion to the quantity of drug; this is owing to the great power that rhubarb has of absorbing and retaining liquids. From the 16 oz. used it is not likely that more than about 8 oz. will be recovered by pressure.

By the above method the root appears to be completely exhausted, and the product is as good an example of the utility of the process as one could wish for, as it possesses in a marked degree the peculiar odour of the root, and can be readily filtered after a few days' standing; indeed, the greater portion can be poured off bright without filtration.

Amongst others which are specially adapted to this process are digitalis, matico, hop, roses, and bearberry. I mention digitalis because heat is injurious to it, and therefore extraction by pressure with cold water is preferable to other methods. Matico should be in coarse powder, whilst bearberry leaves, being very leathery, should be bruised to allow the water to permeate them. Infusion of roses made by this process gives excellent results, evaporation being entirely unnecessary. Very great care must be taken never to leave the drug long in contact with an iron vessel, as all the infusions, except calumba and quassia, and several of the decoctions, contain tannin.

Under this heading may be said a word about the decoction of broom. The tops should be finely chopped and then infused with boiling water; afterwards the method is similar to that of buchu. The drug yields very well to pressure, which is hardly what one would expect judging from its hardness. Before adding the spirit the decoction should be boiled, and the addition of a few drops of liquor potassæ has been recommended to prevent the deposit of scoparin.

The last process is

#### REPERCOLATION.

The apparatus for this need not be at all expensive, being simply furnished by four or five round glass bottles, the

bottoms of which have been cut off; of course the size will depend upon the quantity of the drug. It is well to have a wooden stand so constructed that the inverted bottles can be arranged tier over tier to allow the menstruum to percolate through them successively. My first example of this process is compound infusion of gentian, which cannot be prepared by any better process. It is made as follows:—Grate 4 oz. of fresh lemon-peel and macerate in 4 oz. of rectified spirit and 10 drachms of water. Macerate for twelve hours 2 oz. each of gentian root (which should be in coarsely powdered to about the size of peas) and orange-peel, with sufficient water to moisten them. Then pack equal quantities firmly in the percolators, and pour an ounce or two of cold water into the first one. Wait till this has been all absorbed or percolated through into the next, and then add more water, proceeding in the same manner until 15 oz. of liquid, which has passed through the whole series, have been obtained. The tincture of lemon is then pressed and mixed with the percolate, the whole being made up to a pint if necessary. Boiling must be omitted, since heat has a very deleterious effect on this infusion.

Infusion of orange is also best made after this plan. It should be ground to a No. "20" powder, and after being moistened with water for twelve hours is packed in the percolators rather loosely, as it has a slight tendency to clog. Its exhaustion is very easily accomplished, and it is very curious to note the different stages of exhaustion in the percolators, by the time the menstruum has reached the last the marc in the first being white and almost tasteless.

My third example is cascarilla. In this case a quarter of the drug, which must be in No. "20" powder, should be converted into a rectified spirit tincture, the remainder being treated on the same lines as orange; but the marc should here be packed as tightly as possible; and the infusion must not be boiled, for that would cause it to lose part of its essential oil, and thus impair its keeping properties; indeed, buchu is the only case in which, an essential oil being a constituent of a drug, it is permissible to boil the infusion prepared from it. Serpentry and jaborandi are two other infusions which are best prepared by repercolation. In both cases they should be in coarse powder.

Obviously there are several drugs to which two processes are applicable—cascarilla, matico, jaborandi, and serpentry can all be prepared both by pressure and repercolation.

Senega gives very good results from the first process of all. Cold water exhausts it equally as well as hot; but though I have not tried it, I am inclined to think that this drug in coarse powder would give very good results with either pressure or repercolation.

On the filtration of these preparations I need not dwell, except to say that gentian, buchu, calumba, senega, senna, and broom filter best through flannel; gentian and calumba with the aid of a little magnesia; whilst the remainder mostly filter easily through paper; but quassia will not come bright without the aid of magnesia, and even then it sometimes proves obstinate, only yielding to the persuasions of Chinese clay. Cascarilla must not be filtered through magnesia—Chinese clay is a more suitable medium.

Although senega filters best through flannel, if in quantity it is generally better to pour off as much bright as possible and filter the remainder only. The addition of a few drops of ammonia works wonders in clearing it quickly, and is said to have a preservative action in it as well.

In concluding his paper the author said that, of all the branches of pharmacy, this is the most neglected one, and undeservedly so, for there is hardly another where there is more scope for skill and thought. In spite of what many have to say against them, it is his firm belief that, so far from the time being near when infusions and decoctions as a class will have to take a "back seat," they have a long existence before them, and the best way out of the difficulty is to try and perfect the manufacture of the concentrated preparations, which are manifestly, when properly prepared, more convenient to physician, pharmacist, and patient alike. It seems a great absurdity that their existence should have been ignored by the compilers of the Pharmacopœia, for in the present state of things five-sixths of the chemists use them, although the method of making them is in a great number of cases largely at fault, thus causing much dissatisfaction and naturally tending to bring them into disrepute.



## PHARMACY ACT (IRELAND) AMENDMENT.

THE following memorandum has been addressed to the Attorney-General for Ireland by Mr. J. E. Brunker, M.A., ex-President of the Pharmaceutical Society of Ireland, and has reference to the contemplated legislation in regard to pharmacy in that country:—

The Act of 1875 was, according to the preamble, enacted to supply "a great deficiency in Ireland of establishments and shops for the sale of medicines and compounding prescriptions, and to remove the "great inconvenience thereby arising to the public in many parts of the country."

To accomplish this object, the Act proposed to grant to persons, other than licentiate apothecaries—who under the Act of 1791 were alone entitled to dispense prescriptions in Ireland—a qualification empowering them to "open shop for retailing, dispensing, and compounding poisons and medical prescriptions," and imposed certain conditions as to examinations to be passed by persons desirous of obtaining that qualification.

The Act followed the lines laid down by the British Act of 1868, to some extent ignoring a different condition of things existing in this country to that previously existing in Great Britain.

It enforced the power upon the Council of the Pharmaceutical Society of instituting, *if it thought fit*, two grades of licentiates, viz.:—

- (1) Pharmaceutical chemists,
- (2) Chemists and druggists;

both of which classes would have under the Act the same privileges as dispensers of medical prescriptions as is the case in the sister country.

It may be well to state here how two grades came to be recognised in Great Britain.

So far back as 1841 the Pharmaceutical Society of Great Britain was established as a voluntary society, and gave the name of pharmaceutical chemist to persons who passed its examinations; in 1852 the Society received a Charter, and the title was protected by law, but conferred no public privilege. At this time no qualification was required in Great Britain to enable a person to sell or compound poisons or medical prescriptions, and the title was therefore only a personal distinction.

By the Act of 1868 the sale and dispensing of poisons was limited to persons who should be registered under that Act, as:—

- (1) Pharmaceutical chemists, or
- (2) Chemists and druggists.

These latter were entitled to be registered as such by the fact of having been in business at the time, or could afterwards obtain the qualification by passing a qualifying examination.

The former obtained registration by having become pharmaceutical chemists under the voluntary society prior to the passing of the Act, or subsequently by proceeding from the status of chemist and druggist to the higher grade, by passing a more advanced examination. This gives him greater privileges in the Pharmaceutical Society, but the public rights and duties of both grades are exactly the same.

The condition of things in Ireland was so dissimilar to the above that the first Council of the Pharmaceutical Society of Ireland rightly decided according to its powers (section 15) that there was no valid reason for establishing two grades, with different titles, but the same public position and privileges.

The original council consisted largely of medical practitioners and apothecaries, whose sympathies were enlisted for the quasi-professional side of the chemist's business, viz., dispensing.

If the history of the first two years of the council's work be traced through the regulations submitted for confirmation to the Privy Council, it will be seen that the only status aimed at for its licentiates was that of dispensers; and there is reasonable ground for supposing, from the way in which the Act was framed, that this was its sole purpose.

The subsequent difficulties which have arisen spring entirely from the incompleteness of section 31.

In this section alone throughout the Act, a class of persons

is contemplated who would be legally qualified to carry on the business of retailing poisons, as distinguished from that of dispensing prescriptions; but no power was given to the council to open a register upon which these persons (whose interest was strictly a life one) could be enrolled either voluntarily or compulsorily.

The first council appears to have either ignored this difficulty, or considered itself helpless to deal with it. It is just possible that, had the Council gone boldly to the Privy Council at the time, and asked for powers to deal with these persons by regulation (section 16 (8)), the necessary powers would have been granted. The attempt, however, was not made, and the opportunity has passed away.

Not only have the persons who were engaged in the retailing of poisons in 1875 continued their business, but large numbers have entered on a similar business since, and in the absence of a register the Pharmaceutical Society has been powerless to exercise any control over them.

In 1879 the Council, finding itself so completely hampered by want of powers in this respect, prepared heads of recommendations which it purposed laying before Government for amendment of the Act of 1875.

After carefully considering the matter, it adopted, amongst others, the following recommendation:—

"That not only should persons who were engaged in the sale of poisons in 1875 be placed on a list to be called the list of registered druggists, but that an examination should be instituted for persons who might thereafter desire to be placed on the same list, who would be allowed to retail poisons, but not to dispense, and that on passing this examination they should be registered as registered druggists."

This recommendation, which had been adopted by the Council practically unanimously, on being submitted for approval to the members of the Society at their annual meeting in October, 1879, was rejected by them.

The other recommendations as amended were brought shortly afterwards under the notice of Sir William Kaye, as clerk to the Privy Council, by a deputation of the Council.

No steps were taken to give effect to these recommendations until January, 1883, when a communication was received from Sir William Kaye, asking:—

(1) Whether the provisions of the Sale of Poisons (Ireland) Act, 1870, were observed?

(2) Whether it is considered advisable that any alteration should be made in the existing law by amendment of the Sale of Poisons (Ireland) Act, 1870, or the Pharmacy Act (Ireland), 1875?

A copy of the reply (marked Appendix A) is attached hereto.

In January, 1884, Sir George Trevelyan, then Chief Secretary for Ireland, expressed his willingness to receive a deputation from the Council, which desired to put before him the necessity for amendment in the law.

Prior to waiting upon him, the following resolution was adopted by a bare majority of the Council:—

"That it be an instruction to the deputation about to wait on the Chief Secretary to recommend, that in any amendment of the law affecting pharmacy or the sale of poisons in Ireland, power shall be given to license by examination a grade of registered druggists who shall be empowered to sell poisons, but not dispense prescriptions."

Sir George Trevelyan having held out some hopes that the Government would undertake legislation, the Council was requested to forward in writing all its recommendations.

On April 2, 1884, these were discussed in detail by the Council, when the majority was reversed upon the recommendation set out above, and since that date, with each change of the *personnel* of the Council, the hostility to the perpetuation of a grade of druggists has increased.

There being no prospect of Government action, the Society determined to promote a Bill in the House of Lords in the Session of 1888. This Bill, while making provision for the registration of all chemists and druggists who had rights under section 31 of the Act of 1875, and also for those who had gone into business subsequent to 1875, and for certain assistants and apprentices, proposed to close the door for the future to such a grade of druggists.

The Bill, after having been examined by a Select Committee, passed through the House of Lords with some important amendments in the interest of the chemists and



druggists, who appeared in opposition, but on reaching the House of Commons it for the first time met with a real opposition.

Large concessions were made to meet the wishes of the chemists and druggists, in the hope that even at this cost legislation might be effected, and the existing deadlock removed.

Although members of Parliament of all shades of politics were anxious to see the amended Bill passed into law, it was found impossible at the close of the winter session to get it through.

In the summer of this year (1889) an attempt was made to reintroduce this amended Bill. A conference was held between representatives of the Pharmaceutical Society and of the chemists and druggists, when a compromise was arrived at, in which each side conceded points which had appeared to them important, and a draft Bill was printed and ready for presentation in the House of Commons.

On being presented to the Council of the Pharmaceutical Society it was rejected, and the opinion pronounced upon it by the members and licentiates of the Society is now so pronounced as to render it impossible to reintroduce it as a private Bill, or to expect any retreat from the attitude which the great majority of the Society has taken up upon the subject.

It should be noted that the ground has been somewhat cleared since last year in one respect, inasmuch as the Court of Queen's Bench has, on a case stated, placed beyond doubt the exclusive right of pharmaceutical chemists and apothecaries to dispense medical prescriptions. This was a right which many chemists and druggists were previously unwilling to admit.

Upon the above facts the following considerations are based, viz. :—

I. As matters at present stand, the public are exposed to a grave danger. It was amply demonstrated to the Select Committee of the House of Lords that poisons are distributed in all parts of the country by ignorant persons, and under very dangerous conditions, and that

II. The conditions of the Poisons' Act are generally ignored by these persons.

III. Owing to the defective machinery provided by the Pharmacy Act of 1875 (as shown above), a large number of persons have, though possessing no legal status, obtained a definite *de facto* position as chemists and druggists, and will not allow that position to be taken from them without a struggle.

IV. While it is very undesirable that any person should be allowed to deal in poisons without submitting himself to an educational test, and while the representatives of the Pharmaceutical Society, who were most anxious to bring about a compromise, held out strongly for such a test in all cases, it must be admitted that the chemists and druggists have grounds for holding this position, that having obtained a *de facto* position, owing to the absence of sufficient restricting regulations, they ought not now to be affected by retrospective legislation.

V. The amendment Bill as drafted (copy of which, marked Appendix B, is attached thereto), though it contains features objectionable to both the trading parties proposed to be affected by it, appears to be the fairest possible solution of the difficulty under the circumstances, having regard to—(1) the safety of the public; (2) the large and important trade interests concerned; (3) the efficiency and financial security of the Pharmaceutical Society, and its ability to advance the education of the higher grade of its licentiates; (4) the enlargement of the field from which aspirants to that higher grade may be drawn.

VI. The narrow trades-union spirit by which the Society—numerically a very small one—has been carried away, must alienate the sympathies of the legislature and of the public. If it is persisted in, and legislation postponed, the result may possibly be a removal of educational tests in all grades, with the result of destroying the scientific status of the pharmaceutical chemist, which the Council of the Society has been trying for the past fourteen years to establish. There are not wanting indications that already pressure is being brought to bear upon the Council of the Society to induce it to remove one at least of the regulations, which was designed as a safeguard against a superficial education obtained by cramming.

VII. There is no practical difficulty in the way of so regulating pharmaceutical affairs in Ireland as to have within the Society two bodies of persons, who (1) would afford sufficient evidence of intelligence and education to be intrusted with the sale of poisons to the public; and (2) a more highly educated class (whose education, in fact, should be brought to the highest point attainable), who alone should be intrusted with the responsible duty of dispensing prescriptions.

The draft amendment Bill has been accepted in principle by Irish members of Parliament of all parties, and is now in shape for presentation to the House.

The only sections to which opposition is threatened by any members are 14 and 15, which involve the principle of annual payments to keep on the register the names of persons who have registered in either grade (*prospective only*).

Some medical members of Parliament have expressed hostility to these clauses, on the ground that they would form a precedent which might afterwards affect them.

The clauses, however, are of great importance for the carrying out of the machinery of the Bill, for the following reasons.

I. The Society cannot carry on the increased duties imposed upon it without a considerable increase in its income.

II. The small annual fee proposed to be levied would hardly be felt by those who would have to pay it, while

III. A largely increased registration fee, which would be the necessary alternative, would press severely upon a great many of those who would seek registration as druggists.

December, 1889.

J. E. BRUNKER.

## Legal Reports.

### MARSHALL v. NEALE.—SALE OF A BUSINESS.

THIS case came before Mr. Justice Mathew, sitting without a jury, in the Queen's Bench on February 13. The action was brought by Mr. E. Marshall, a duly qualified pharmaceutical chemist, to recover damages in reference to alleged misrepresentations on the part of the defendant with regard to the sale of a business at Henfield, near Brighton. Mr. Neale denied the misrepresentations, and counter-claimed for 125*l.*, the amount of two bills given him by the plaintiff.

Mr. Ashton was counsel for the plaintiff; Mr. Smily represented Mr. Neale.

The plaintiff's case was that in nine months in 1889 he only took 467*l.*, as opposed to 896*l.* which Mr. Neale said he made during the corresponding period in 1888. He also complained that the defendant had represented the turnover at 1,100*l.*, whereas, according to Mr. Marshall, it was impossible that that amount could have been made. Moreover, assuming that the 1,100*l.* was stated correctly, the plaintiff said that Mr. Neale had not taken into account a large number of payments which were debts at the time he left the business. In the course of the defendant's evidence it was stated that they were obliged to sell some of the patent medicines almost at cost price, in order to compete with the Sussex Co-operative Drug Stores and other establishments at Brighton. In cross-examination, Mr. Neale said he was not a member of the Pharmaceutical Society.

Mr. Justice Mathew gave judgment on February 17. He said the disagreeable task had been imposed upon the court of determining a question of fraud. The defendant had produced certain books; but they added nothing whatever to the statement Mr. Neale made by word of mouth, for the reason that there was no mode whatever of checking the entries the defendant made in those books. Very serious questions were raised respecting them. The validity of the books depended on nothing more than the statement of the defendant. The plaintiff's case was that the alleged receipts dwindled immediately upon his going into possession, and he received nothing like the amount the defendant said he got during the time he was carrying on the business. No attempt was made to controvert the statement made by Mr. Marshall in that respect. It was for the defendant to show how the falling off was to be accounted for; and it was said Mr. Neale was a chemist who knew the people at Henfield, and



acted not merely as a chemist, but as a medical man, and when he gave up the business the patients went elsewhere. It was not a satisfactory explanation to his (the learned judge's) mind. He had come to the conclusion that the statement made with regard to the takings was false. He was not satisfied that the statements as to the receipts were accurate, or that the defendant stated the truth with reference to them. He (Mr. Justice Mathew) believed they were much less. The learned counsel for the defendant relied upon the fact that there was a large stock. No doubt that fact would have a very considerable influence on the mind of the plaintiff. He (the judge) could not help thinking a large stock was procured for the purpose of having effect on the mind of a purchaser. He was not satisfied that for the purposes of the business any such large stock was required. He had come to the conclusion that the plaintiff was right in the charges he made against the defendant, and that the plaintiff was cheated. The damages he thought he ought to find would be to the amount the plaintiff had undertaken to pay in the shape of promissory notes for the goodwill. He, therefore, gave judgment for the plaintiff in the action for nominal damages upon the understanding that the promissory notes which were in court would be handed to the plaintiff; and upon the counter-claim he gave also judgment for the plaintiff, for he had established in defence that the notes were obtained from him by misrepresentation. He gave all such certificates as were necessary to enable the plaintiff to recover his costs on the High Court scale.

#### A WHOLESALE DRUGGIST'S FEE.

In the City of London Court, on Wednesday, before Mr. Registrar Wild, the case of *Christy v. Herzog* was heard. The action was brought by Mr. Thomas Christy, druggist, 12 Lime Street, E.C., to recover the sum of 4 guineas, the balance of 5 guineas for giving evidence upon the retainer of the defendant, Mr. Conrad Herzog, chemical engineer and dealer in chemical patents, Mansion House Chambers, Queen Victoria Street, E.C., in an action in the Lord Mayor's Court, in which the present defendant was plaintiff. Mr. E. B. Tattershall appeared for the plaintiff, and the defendant appeared in person.

The defendant brought an action in the Lord Mayor's Court last October (which was duly reported at the time in *THE CHEMIST AND DRUGGIST*) to recover the sum of 50*l.* paid for the purchase of what was alleged to be a chemical secret for solidifying and relieving gasoline. The evidence of the plaintiff, Mr. Christy, was necessary in regard to the examination and identification of Bois de Panama, which had been sold to the defendant Herzog as quillaya bark. Mr. Tattershall said the plaintiff worked up the literature on the subject in order to make himself thoroughly conversant with the details. That took him a considerable time, and then he gave evidence at the Lord Mayor's Court on behalf of Mr. Herzog. Upon Mr. Christy's evidence the jury found a verdict for Mr. Herzog. Now that the plaintiff asked for his fees he was told the case was going to appeal, and that he must wait before he got his fees.

The Defendant: It was arranged to pay one guinea for attending court, which I paid at once, and that is all I owe.

Mr. Tattershall said the defendant had been given credit for that. The four guineas was for getting up the subject.

The Defendant understood that was done "as a friend" for his manager, whom the plaintiff knew.

Mr. Registrar Wild: "Friends" are very dangerous things.

Mr. Tattershall said the defendant came to his client because Mr. Christy was the only man in the chemical trade who could give the Court and jury the information necessary. He handed to the Registrar what he said was a very good report of the trial, which appeared in *THE CHEMIST AND DRUGGIST*.

Mr. Registrar Wild said it was clear that the plaintiff, as a professional druggist, was entitled to a qualifying fee. If the defendant went to the plaintiff and asked him to do as he had done, he was not only entitled to his fee for attending court, but for looking up the subject and making any necessary notes in order to qualify himself to give the evidence required. The plaintiff's services must not be measured by the length of time he was occupied. This was evidence of a particular nature required. If the defendant had even five

minutes' consultation with a celebrated doctor he would have to pay five guineas for it.

The Defendant said his manager went to the plaintiff as a friend, simply to get a few hints. The plaintiff could give no special evidence, as he had no personal knowledge.

Mr. Registrar Wild objected to that. The defendant clearly did not think that, or he would not have put the plaintiff's evidence before the jury.

The Defendant then made a very long statement, at the end of which.

Mr. Registrar Wild said the plaintiff was entitled to be paid for his skill.

The Defendant: There is no skill.

Mr. Registrar Wild: You thought so at the time. I must find for the plaintiff for the four guineas, and I think he has let you off very well.

The Defendant: Can't I appeal?

Mr. Registrar Wild: No, and a good thing for you you can't. If you employ these gentlemen you must pay them.

Judgment was accordingly given for the plaintiff for the amount claimed with costs.

#### BANKRUPTCY REPORTS.

##### *Re* RICHARD DORMER, Garston, Manufacturing Chemist.

At the Liverpool Bankruptcy Court, on February 14, Mr. Mulholland, on behalf of the bankrupt, a manufacturing chemist, of Garston, applied for a variation in the terms of the discharge which some time ago was granted to the bankrupt, conditional upon his paying 5*s.* in the pound, by which variation the bankrupt would receive his immediate discharge. Mr. G. B. Rodway, on behalf of the official receiver, opposed. It appeared that the bankrupt, subsequent to the order of the court, had been to his creditors, who were only three in number, had paid to them separately 3*s.* in the pound in discharge of their respective debts, and now asked for his unconditional discharge. His Honour said the court could not countenance such a proceeding on the part of a debtor. The correct course would have been for the debtor to have called a meeting of his creditors, and obtained a formal resolution for submission to the court. He therefore, without calling on Mr. Rodway, dismissed the application.

##### *Re* WILLIAM ROBERT JONES, Birmingham, Dispenser at the Workhouse.

At the Birmingham County Court, on February 13, this debtor came before Mr. Registrar Cole for his public examination. His statement of affairs showed liabilities 577*l.*, and assets *nil*. His creditors number forty-one, and twenty-one of them are for money lent. He was examined by Mr. Sharp, official receiver, and stated that he began business as a chemist and druggist in 1863, having a capital of 600*l.* He became involved in accommodation-bill transactions, and had to file his petition in 1880. His creditors got 5½*d.* in the pound. Since that period he has been a dispenser at the Birmingham workhouse at a salary which commenced at 100*l.*, but is now 140*l.* a year. In consequence of serious illness in his family he had to borrow money, and could not free himself. Year by year, since 1881, his expenses had exceeded his income. The Registrar: You have been pretty successful among the money-lenders; almost all the money-lenders in Birmingham have made advances to you. Did you sign declarations as to your position when you went to them to borrow? The Debtor: I don't remember making any declaration at all; they lent it to me on the security of my position. The Registrar: I see in your accounts you take credit for 237*l.* in respect of writs, law costs, and county court expenses. Mr. Sharp: It is a complete waste of other people's money. The bankrupt has offered his creditors a composition of 5*s.* in the pound, to be paid out of his salary by instalments of 5*l.* per month. I don't know, of course, whether the judge will approve of it. The Registrar said that, notwithstanding the experience he had had before his failure in 1880, the debtor, as soon as he got free from that position, began again to borrow money in the most reckless way, and had continued to do so up to the time of the present petition. The examination was concluded.



*Re* WALKER HOWLETT, 75 Hill Street, Peckham, and late of 3 St. George's Circus, Southwark, Chemist, &c.

THIS bankrupt filed his own petition in the London Bankruptcy Court on January 6, having unsecured debts of 145*l.* 5*s.* 4*d.*, and assets valued at 13*l.* 2*s.* He attended before Mr. Registrar Linklater for his public examination on February 20, and in reply to Mr. Howell, the official solicitor, stated that he formerly carried on the business of a chemist and dispenser at St. George's Circus, but now had a small chemist's business at Hill Street, Peckham, and was also employed as a surgeon's assistant at a weekly salary of 30*s.* He bought the St. George's Circus business in 1879 for 800*l.*, and sold it last September for 160*l.* That money was devoted to the payment of rent and sundry creditors. The present indebtedness of 140*l.* was also in respect of that business, and related to the debts he was unable to pay from the 160*l.* The failure was caused by loss upon the trading. He knew for some time past that the business at St. George's Circus was falling off, and had for the last year or two tried to sell it as a going concern. With that view he continued to trade, and hoped to sell for a sufficient sum to pay off all debts, but in that he was disappointed. The falling off in the trading was chiefly due to increased competition in the neighbourhood. New shops were continually being opened, and one was even started at the next shop to his own. He had tried to make the business a success by working hard and devoting all his time to it. There was no opposition, and the examination was ordered to be concluded. The following are the principal creditors unsecured:—

	£	s.	d.
Baiss Bros., wholesale druggists, 4 Jewry Street, E.C.	12	14	0
Hollingsworth, Messrs., 13 High Holborn ..	35	0	0
Howlett, A., 35 Powles Square, Bayswater ..	45	5	10
Smith, J. H., King's Lynn .. ..	50	0	0

## Gazette.

### PARTNERSHIPS DISSOLVED.

Barelay, F. K., Hoare, R. G., Garbutt, J. H., & Clayton, J. (under the style of Barclay, Clayton & Co.), Crucifix Lane, Bermondsey, mineral-water manufacturers and bouillon agents; as far as regards F. K. Barelay and R. G. Hoare.

Rothwell, James, & Co., Bacup, aerated-water manufacturers and dealers in grocers' sundries.

### THE BANKRUPTCY ACT, 1883.

#### RECEIVING ORDERS.

Austin, Henry William (formerly trading as Austin & Son), late of Aston, near Birmingham, drysalter.

Macdonald, Ewen, Cheltenham, late of Cleve Hill, near Cheltenham, chemist and druggist.

#### ADJUDICATIONS

Austin, Henry William (formerly trading as Austin & Son), late of Aston, near Birmingham, drysalter.

Lupton, James Irvine, Richmond, Surrey, veterinary surgeon.

#### FIRST MEETINGS AND PUBLIC EXAMINATIONS

Brooklehurst, Thomas Howard, Bredbury, near Stockport, surgeon—Feb. 25, Official Receiver's offices, Stockport; March 6, Court House, Stockport.

Ripley, George, Wortley, near Leeds, aerated-water manufacturer—Feb. 26, Official Receiver's offices, Leeds; March 11, County Court House, Leeds.

#### NOTICE OF DIVIDEND.

Ridout, George Vatchel, Leeds, surgeon-dentist—first and final div. of 1*s.* 10*d.*, Feb. 21, Official Receiver's office, Leeds.

#### APPLICATION FOR DEBTOR'S DISCHARGE.

Phillips, John Philip, Staveley, chemist and druggist—April 3, Chesterfield.

#### ORDER MADE ON APPLICATION FOR DISCHARGE.

Edwards, William, Hadlarsfield, mineral-water manufacturer—discharge granted forthwith.

#### SCOTCH SEQUESTRATION.

Howie, A. L., Glasgow, chemical metallurgist—Feb. 25, at 12, Faculty Hall, Glasgow.

## Personalities.

MR. EDWARD WOOLF, druggists' sundries dealer, has removed his business from 105 Mott Street, Birmingham, to 6 St. George's Crescent, Brearly Street, in the same city.

MR. F. R. RUMP has bought from Mr. S. E. Cowap the business lately conducted by the latter, at Church Street, Midhurst.

MR. W. BAXTER, jun., pharmaceutical chemist, of Bromley Kent, has bought the business of the late Mr. F. W. Haydon, at Fordingbridge.

MR. M. M. PROCTER, of Leamington, who has travelled for Messrs. Southall Brothers & Barclay for over nine years, is transferring his services to Messrs. Hodgkinson, Treacher & Clarke.

MR. BENJAMIN ROBINSON, Mayor of Salford, pharmaceutical chemist, and the Mayoress, entertained a large number of guests at the Peel Park Museum on Wednesday evening, the 12th inst. After the reception, dancing was indulged in to the strains of a first-class string band. The arrangements were perfect, and the guests seemed fully to appreciate the kindly attention and hospitality of the mayor and mayoress. The next evening (Thursday) was devoted to a "children's evening," and the same rooms were crowded with a brilliant assemblage of 200 young guests, who thoroughly enjoyed the delightful entertainment provided for them by their worthy host and hostess.

### MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

THOMPSON—GREAVES.—On February 13, at St. Margaret's, Horsforth, by the Rev. J. Holdom, assisted by the Rev. T. R. Walton-Pearson, Vicar, George Thompson, chemist, of Knaresbro', to Gertrude Isabel, youngest daughter of W. H. Greaves, Oxford House, Horsforth.

CARR—BLOOR.—On January 9, at St. Mark's Church, Sheffield, by the Rev. H. A. Favell, M.A., Vicar, Percy Carr, chemist and druggist, eldest son of Francis Carr, Broomhall Park, Sheffield, to Ada, youngest daughter of Henry Bloor, Summerfield, Sheffield.

### DEATHS.

BALLS.—On February 8, Mr. George Balls, pharmaceutical chemist, High Street, Deptford. Aged 66.

EXLEY.—On February 7, Mr. George Exley, chemist and druggist, Hunslet Lane, Leeds. Aged 61.

HOWARD.—On January 26, Mr. J. H. H. Howard, chemist and druggist, Forest Lane, Stratford. Aged 56.

KEITH.—On February 16, at 4 Marchmont Crescent, Edinburgh, Mrs. Keith, the wife of Mr. John Keith, chemist and druggist, Newton Stewart.

KERNER.—At Frankfort, on February 9, Dr. G. Kerner, in his 55th year. The deceased gentleman was a well-known quinologist, and for many years managing chemist in the Zimmer's Quinine Factory at Frankfort. He was the inventor of the ammonia and ether test for quinine, which is now the recognised test, with certain modifications, in most Pharmacopœias, including our own.

KNAGGS.—On January 30, Mr. George Knaggs, chemist and druggist, late of Hunmanby, Yorkshire. Aged 69.

LOADMAN.—On February 7, Mr. James Loadman, chemist and druggist, East Bank Street, Southport. Aged 37.

LAWRENCE.—On February 6, Mr. Benjamin Lawrence, chemist and druggist, Penkridge, Staffordshire. Aged 62.

MORRALL.—On February 6, Mr. Edward Ernest Morrall, pharmaceutical chemist, Quay House, Bridgnorth. Aged 25.

SPEIGHT.—On January 18, Mr. Robert Speight, chemist and druggist, late of Circus Road, St. John's Wood, N.W. Aged 42.



LECTURES BY PHARMACISTS.  
(POST-CARD COMPETITION, JANUARY).



VER ninety competitors favoured us with skeletons of lectures suitable for delivery by chemists to schools, literary institutions, or miscellaneous audiences.

The lecture trap is by no means so successful in the present age as it was twenty, thirty, and forty years ago. It may be that the rising generation is less eager

in the pursuit of knowledge than its predecessor, or it may be that the lecturers of old wore out their welcome by their prolixity and incompetence. It must be admitted that their performances were often painfully tedious. Masters of their subjects were often utterly unable to convey a clear idea of them to their audiences, but more often still, perhaps, the lecturers had too obviously crammed themselves for the occasion, and depended for success on a glib tongue and a few well-worn jokes. But the worst foes to the lecture system were the pompous chairmen and the verbose individuals who proposed and seconded the votes of thanks. To sensitive listeners these perfectly useless appendages were calculated to take the edge off a bright and sparkling lecture, but when added to a dreary essay they tended to make the performance too insupportable to take the chance of repetition.

Lecturing offers to young and clever chemists a capital chance of self-advertisement, and there are plenty of openings even yet for its practice. But it may be permitted to offer to even the youngest and cleverest a word or two of advice from the point of view of the audience, which, after all, deserves some consideration. The first essential to a successful lecture is that it should be most carefully prepared. If any number of ladies and gentlemen can be induced to sit still for an hour while you are talking, the commonest politeness requires that you should spare no pains to make that hour as little irksome as possible. Your experiments should be thoroughly well rehearsed and need no preparation at the time. Give your lecture, or at least the greater part of it, extempore; if you cannot do this do not lecture at all. Avoid by all means anything like a professorial manner, or assumption of superior knowledge, and above all things keep your performance well within an hour. If, hearing in mind these conditions, you can get your audience interested, not in yourself, but in your topic, you will have done a piece of business which will pay you for your trouble, even though you get neither fee nor vote of thanks.

The favourite subject for a lecture, as judged by our competition, appears to be

#### WATER.

We have a dozen lectures submitted on this subject, most of them very lucidly summarised. Our space will only allow us to quote at present three typical specimens.

**The Chemistry of Water.**—Water formerly considered to be an element, now proved to be a compound, shown synthetically and analytically (explain terms) to be built up of two elements. Liken synthesis to the putting together of works to form a watch; taking it to pieces illustrates analysis. Mix oxygen and hydrogen in definite proportions, apply heat and prove water is formed—*i.e.* synthesis; also burn jet of hydrogen in air, hold cold glass against flame and show water condensed. Prove composition and proportion of elements by decomposing with three or four Daniell's

cells, and test gases formed—*i.e.*, analysis; also pass steam through heated iron barrel containing iron turnings, prove hydrogen at the other end. Discuss freezing and boiling points, show how both are influenced by pressure, give experiment of hot water in vessel boiling when plunged into cold water, and explain. Expansion and contraction of water; illustrate evaporation and condensation, and so show how rain is formed. Show the almost omnipresence of water throughout the three kingdoms. To show how necessary oxygen is to support life (animal combustion) show how great a supporter of combustion by burning in bottles of oxygen charcoal, sulphur, thin iron wire, &c. Discuss hard and soft waters and explain terms, also the uses of water and steam in factories, our large guns made by its aid, and also pins, &c. We once had to do without iron, coal, gas, &c., but never without water. All gases should be got ready previously in receivers and everything else to hand, so as to have no delay in lecture, or it would be tiresome to the audience; refrain from using chemical formulæ and symbols.—*A. F. Brookes, 255 Grange Road, Birkenhead.*

**Drinking Waters.**—Give outline of conveyance of water to large towns. How and with what it is likely to get contaminated. Process it undergoes in filter-beds (diagram showing section of a filter-bed). Experiment of dirty water through charcoal filter. Hardness: what is meant by term, how caused, its removal by chemical means and boiling (experiment), effect on soaps and boilers. Danger of lead pipes, lead-lined cisterns, furred kettles. Wisdom of letting tap run before drinking. Wisdom of submitting doubtful water to your family chemist for analysis. Symptoms of lead-poisoning: drop-wrist, blue line on gums. Experiment:  $H_2S$  as test for lead. Experiment: Permanganate of potash test for organic matter. Have microscope on table showing animalculæ. Describe a few filters; have them on view, if possible, and point out the good points of each, also their defects. Touch on distilled water, how made, &c. Mention oxygenated water as being the latest thing, pass a sample round.—*R. Fred Reynolds, Leeds.*

**Sea World**—Treat fact that water is the rule, land the exception—145,500,000 square miles water, 51,500,000 square miles land. Various oceans, their positions, &c.; uses for locomotion, in cleansing rivers, and distributing food for inhabitants of the sea. Supposed depth, and means used for ascertaining same. Various colours of seas, their positions and names. Composition of sea-water. Tides: causes, uses, and exceptionally large tides. Waves: ground waves, surface waves; whirlpools, cause, &c.; maelstrom, its power; earthquake waves; currents, various, and positions, causes, uses. Sea freezes at the Poles, where it is less salty and earth rotates slower. Icebergs and ice-fields, causes, &c. Phosphorescence, various forms, causes; description of various infusoria, medusa, starfish, molluscs, and other phosphorescence-producers. Treat sea-plants slightly; sponges, their history, collection, &c. Corals: history, production, and life of the coral polype. Coral fishing. Sea-urchins; oysters, their production, growth, construction, cultivation, &c. Mussels and other shell fish. Pearls: pintadine (mother of pearl), what it is, various kinds; iridescence and cause of same (explain with soap-hubble). How pearl drops are formed. Pearl diving and preparation. Cuttle-fish, their life, strange shape, with tales of their great size, &c., and the interesting means they use for capturing and eluding capture. Mention ordinary fishes, how caught, &c.; whales, turtles, &c., with interesting details of size, kinds, adventurous captures, &c. The whole lecture to be illustrated as practically as convenient with drawings, maps, and specimens dealing specially on topics relating to chemists' business—oss spia, sponges various, litmus re-action, cod-liver oil, &c.—*Harris, care of Mr. Biggleston, Canterbury.*

#### THE ATMOSPHERE.

This is the theme on six cards, and from these we take a couple:—

**The Air we Breathe.**—Composition and weight (balloonists' experiences). Experiments: hydrogen, oxygen, and nitrogen; diagram of lungs; explain why composition is constant. Pressure: barometer, &c. Boil water in flask, cork, apply cold to make boil again. Show water-hammer and pulsometer. Air-pump experiments, good. How heated



by sun, cold above. Oxygen, the fire of life, all living fires, explain, compare with fire, experiment with light, charcoal, iron wire,  $\frac{1}{5}$  of atmosphere,  $\frac{1}{3}$  solid crust of earth. Dr. Smith's experiments, how much each exercise demands, riding, walking, swimming, &c., give table. Dancing in crowded rooms, respired once loses 5 per cent. O, our friend, carbonic gas our enemy, prepare and experiment with, one vessel to another. Wells, mines, choke-damp. Fresh air, ventilation (which most people think always means draught). Builders ignorant of requirements of our body. Bedrooms, 10 hours, 130 cubic feet, see you get it and not headache. Ventilators in chimneys good if rightly fixed, explain. More fresh air the less physis, which, Shakespeare said, unless good, "throw to the dogs."—*F. G. Curtis, Ealing, W.*

**The Atmosphere.**—Derivation of word, what is it, height, proof of existence, Torricelli's theory, Blaise Pascal's proof, Gay-Lussac's experiment (1804), weight, pressure on our bodies, why it does not crush us, show and explain air-pump, hand-glass, Magdeburg hemispheres, apple-cutter. Elasticity of air-bubble in egg, air from malt-liquor. The windmill, experiments in vacuo. Why height of atmosphere is not uniform, rate wind travels, causes which produce wind, how air is heated. Athermic bodies, diathermic bodies, line of perpetual snow. Composition of air, law of diffusion, proof of its being a mechanical mixture, refractive power, percentage composition. Rain, snow, hail. History: opinions of Van Helmont, 1640; Macques', 1650; Boyle, 1660; Rutherford, 1772; Priestly, 1774; Lavoisier, 1777; also experiments by Cavendish, 1781; Prout, Biot, and Arago; Dumas and Boussingault, and Regnault. Analysis by Falconer, Fontana, Cavendish, Humbolt, Gay-Lussac, Thenard, Scheele, Saussure, Berthollet, Parrot, Achard, Brunner, Réboul, and Sir H. Davy. Atmosphere as a natural disinfectant. Barometers: construction and use. Thermometers: construction and use.—*Thomas A. O. Heale, 44 Seven Sisters' Road, Holloway, N.*

#### FOOD AND ITS ADULTERATION

forms a fruitful topic, though correspondents do not show means of illustrating it effectively by means of experiments. To look through a microscope at the end of a lecture is not exhilarating. The following are some of the lectures proposed:—

**Our Breakfast Table.**—(1) Our needs, our luxuries, and our digestion. (2) The carbon we consume, the oxygen we require to do it, and the nitrogenous bodies we absorb, comprehending the composition of the atmosphere, of starchy and of azotic food. (3) The relative value of the different cereals as a foundation for our day's work, and a description of a perfect bread comprising the whole of the constituents of wheat as the staff of life. (4) The value of an admixture of foods, giving the reasons why we commence with porridge as a food containing fat which can be eaten without addition, and which we follow with a nitrogenous meat, such as ham or beefsteak. (5) The composition of milk, and the explanation of its being a body which will support life of itself. (6) The composition of eggs, and the advisability of eating a fat with them. (7) The composition of butter, and the necessity of eating a starchy food with it. (8) The composition of cheese, and its value as a digestive agent, and a caution as to its constipating quality. (9) The beverages we drink, their composition, their value as restoratives and sedatives. (10) An exhibition of the various foods usually found on a middle-class breakfast table, with the microscope.—*Fred E. Johnson, chemist, Halesworth.*

**Table Science, or Reason and the Roasting of Eggs.**—Syllabus. Preliminary historical sketch.—Man and his food. The noble savage at breakfast. Invention of the art of dining. Rise and progress of indigestion. Chemical and medical research with regard to food products, &c. Brief résumé of general laws with regard to subject. **Cooks.**—"The woman who can cook sits upon the apex of civilisation." Chops v. Chopin. Hours and conditions of meals; exercise; air; social conditions, &c.; chemistry of digestion (outline). Particulars of diet:—Breakfast.—Coffee and cocoa, historical and chemical; milk, and incidentally water; eggs: how to cook, value as food, &c.; bread and butter; constituents and chemistry of, &c.; meat breakfasts, fish, &c. Luncheon and dinner—Soups, fish, advantages of and properties of principal varieties. Sauces: how to make,

what to avoid, &c. Meats, roast and boiled. Modes of cooking, advantages of each. Constituents of various meats, proportion of nitrogenous matter, fibrine, &c., value of fat. Vegetables and vegetarians, or greens and greenhorns. How to boil various vegetables, puddings, &c. Constituents, &c., of rice, tapioca, macaroni, &c. Stimulants, "To beer or not to beer?" Chemical and other notes on beer, wine, &c., use and abuse. Tea and supper.—History, &c., of tea. Infants' and invalids' foods, what to choose, how to cook, &c. In conclusion, artificial digestives, correctives, remedial agents, &c.; peroration.—*C. C. Bell, Epworth.*

**The Chemistry of Foods.**—The albumens or proteids of both vegetable and animal origin form the staple food of man and animals. The various forms of derived albumens, and process of digestion. How fat is absorbed from the lower intestine when mixed with bile. Why deficiency of bile causes nausea. Malt extract as a concentrated food. The activity of vegetable diastase compared with the ptyalin of saliva and pancreatin. Trace progress of decomposition of starch when acted upon by diastase, starch  $C_6H_{10}O_5$  to glucose  $C_6H_{12}O_6$ , by addition of a molecule of water, to maltose  $C_{12}H_{22}O_{11}$ , when the glucose yields up the water. How the cellular tissue (cellulose) of plants is identical with starch, and why we may think that during a time of necessity the wood of the forest, when altered by the magic wand of the chemist, may be utilised as food.—*A. Ball, 157 Tufnell Park Road, N.*

**Common Adulterations of Food and their Detection.**—Bread: Give composition, mineral and organic adulterations. Milk: Composition, detection of added water, and abstraction of cream; also other adulterations, such as sugar, glycerine, salt, and carbonate of soda. Butter: Composition, detection of excessive quantity of water, salt, &c.; also the distinction between genuine butter and margarine. Cheese: Composition, and detection of foreign fats, such as lard, oleo-margarine, &c. Lard: Detection of too great a percentage of water. Tea: Detection of colouring-matter, spent leaves faced, &c. Coffee: Detection of chicory, burnt sugar, roasted cereals, &c. Cocoa: Presence of starch, sugar, and mineral adulterants. Mustard: Detection of starch and turmeric. Pepper, beer, &c.: Detection of adulterants.—*H. Eley, 160 Monument Road, Birmingham.*

Among lectures which may stand by themselves are the following:—

**First Aid to the Injured.**—Commence with description of bones in human frame with aid of skeleton; then the muscular, respiratory, and circulatory systems by diagrams; and the three kinds of hæmorrhage—arterial, venous, and capillary. Show position of main arteries by diagram, also where pressure should be applied by digits or tourniquet to arrest hæmorrhage. Enumerate the number of articles that can be used as pads or bandages. Have a boy from the audience to illustrate the following: explain the many uses a triangular bandage may be put to by bandaging your boy. Show difference between a reef knot and a granny. Devote a short time to fractures; name the different varieties, viz., simple, compound, complicated, and comminuted. Give examples of the most common fractures, and the manner in which first aid should be given, by applying splints, or by borrowing from your audience articles that can be used in the place of splints, such as walking-sticks, parasols, newspapers, umbrellas, &c. If time permits, give a short description of first aid in cases of shock, concussion of the brain, fits, strokes, fainting, alcoholic poisoning, also poisoning from irritants and narcotics, &c.—*G. A. Hebblethwaite, 69 Church Street, Drypool, Hull.*

**Scientific Apparatus, with Demonstrations.**—1. The apparatus—(a) Application to which it is put; (b) Description of the various parts; (c) Principles on which the various parts are composed; (d) Demonstrations. The following may be taken in illustration:—Microscope, spectroscope, photometer, galvanic battery, induction coils, and Geissler tubes. The type of illustrations shown will, however, depend on the class of audience.—*Mirabeau.*

We shall have a further selection of outline lectures to give, and, of course, reserve our reward

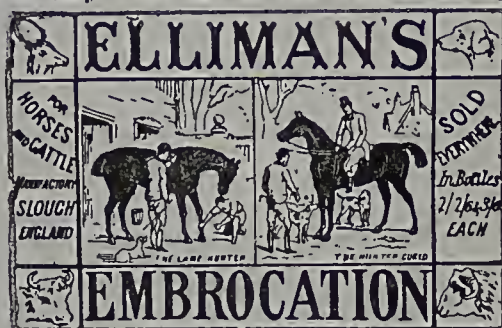


REGISTERED **"SANITAS"** TRADE MARK.  
IS THE IDEAL  
**DISINFECTANT,**  
And is most used in Antiseptic Surgery.  
LARGEST SALE IN THE WORLD.

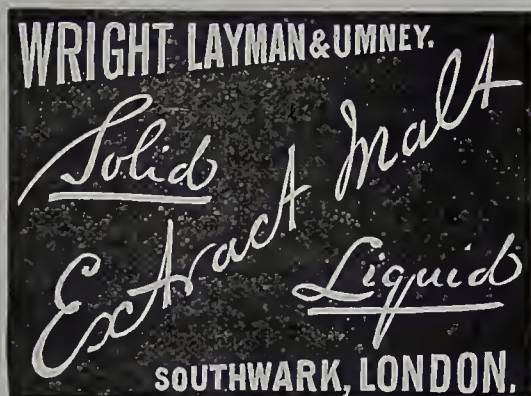
The Trade, in their own interest, should stock all our "Sanitas" Preparations.

**KINGZETT'S BACTERICIDES**  
AND  
PATENT PRESERVED PEROXIDE OF HYDROGEN  
**THE SANITAS CO., BETHNAL GREEN, E.**

SHOW CARDS, 24×17 or 17×12,  
Free to any Address in the United Kingdom.



See First page, facing inside of front of Cover, in the first issue of the month for latest particulars.



**MUMFORD'S**  
FARRINGTON ROAD, LONDON, E.C.  
**PURE CRUSHED LINSEED IS NOW**  
**17/- cwt. CARRIAGE PAID**

TO ANY RAILWAY STATION IN ENGLAND AND HALF TO STATIONS IN SCOTLAND, IRELAND, AND WALES. [2]

*Creolin* LANO- *Creolin*  
**JEYES' *Creolin* GAUZE**

**GO ADVERTISERS**  
CATALOGUES & PRICE LISTS ILLUSTRATED  
Advert. Blocks Engraved in Best Style  
at Moderate Cost. + + + + + APPLY TO  
**W. BARKER & SON, 172, STRAND, LONDON.**

# SILICATED CARBON FILTERS



**PATENT SELF-AERATING  
MOVEABLE BLOCKS  
WORKS, BATTERSEA LONDON. S.W.**

*Fletcher's*  
*Concentrated Liquors*

See Diary Pages 17 and 18.

## EDITORIAL NOTES.

### POISONOUS PATENT MEDICINES.

OUR report of the inquest at Wandsworth last week, in the course of which Mr. Braxton Hicks, the coroner for Mid Surrey, made such a vigorous attack on the practice of selling patent medicines containing poisons without regard to the statutory provisions as to labelling, &c., brings us face to face with a neglect of the Pharmacy Act at which chemists, patent-medicine dealers, and the pharmaceutical and the police authorities have all connived. Everybody concerned is aware, we suppose—we have repeated it to the trade dozens of times—that if a poison is contained in a patent or proprietary medicine, that medicine is just as much subject to the regulations of the 17th section of the Pharmacy Act as if sold in any other form. This is not a matter which either is or can be in dispute. The exemption of "the making or dealing in patent medicines" which occurs in the 16th section applies only to what is "hereinbefore contained"; that is to say, unregistered persons may sell them. But all persons, registered and unregistered alike, are required to obey the provisions of the 17th section if they sell any of these medicines which, by their composition, come within the range indicated by the poisonous schedule. The cases in which these provisions are obeyed might almost be counted on the thumbs.

The case which called forth Mr. Braxton Hicks's remarks was one to which most chemists are liable. A 4-oz. cough linetus, containing 2 grains of morphia, had been bought at a city shop, and a child finding it standing about, and tempted by the sweet taste of it, had swallowed nearly the whole of it, and had died in consequence. Both father and mother testified that they did not know it was poisonous, and the mother said she had a special cupboard for poisons where she should have kept it had she known. There was a caution label on the bottle, saying, "To be kept out of the reach of children, as it is sweet and they might take too much," but this, of course, is not what the Act requires. Mr. Braxton Hicks, who has evidently studied the Pharmacy Act closely, showed at some length that the Act had not been complied with, and discoursed on the dangers which the legislature



had intended to avert when they passed the Act, and of which the case before him was an illustration. He intimated, further, that he would consider whether he would direct any further proceedings, and we do not know at present whether he has yet done so. But if they should not be taken in this case, we may look for them in regard to some other before long, as the risks are obvious, and it is the duty of coroners to use such means to protect the public as the law has provided. Mr. Hicks says, too, that most of the other coroners take the same view of the matter as he does.

The coroner went somewhat out of his way in his summing up to argue that to carry out the provisions of the Act in the manner suggested would be an ultimate benefit to the "the trade" rather than a disadvantage. This line of comment was probably suggested by the remark made by the chemist's assistant who appeared as a witness, that "if they labelled it 'poison' people would not buy it." Even if that certainly were so, it would be no sort of answer to a charge of neglect of legal requirements; but we fully agree with the coroner that the strict enforcement of the provisions of the Act in regard to the sale of poisons of all sorts would have been the wisest policy chemists could have taken for the protection of their own interests, as well as for the protection of the public. It happens, curiously, that this very point was urged, on the same day as that on which the inquest was held, by Dr. Symes in his presidential address to the Liverpool Chemists' Association.

Mr. Braxton Hicks volunteered another opinion suggested by the case before him, but not directly raised by it. He expressed an opinion corresponding with that which has been published by Mr. Alpe in his "Handy Book of Medicine Stamp Duty." Both authorities agree that the exemption granted in the Pharmacy Act to the making and dealing in patent medicines applies only to medicines sold under the authority of letters patent, and not to any and every proprietary medicine to which in popular language the term is locally given. This is an important matter, which ought to have long ago been tested by the Pharmaceutical Council, with whom rests the enforcement of the fifteenth section of the Act. It would be at least as well to do the best we can with the old Act before applying for new machinery.

### PHARMACEUTICAL LEGISLATION FOR IRELAND.

WE are somewhat surprised that the chemists and druggists of Ireland, who profess to have organised themselves into powerful bodies for the express purpose of assuring their position by means of legislation, should have allowed the early days of the Parliamentary session to find them unprepared with a project of law. We get reports occasionally of their tea-meetings, votes of thanks to each other, fraternising communications between Dublin and Belfast, and so forth; and not very long ago they managed to get an opportunity to place before the Attorney-General for Ireland a statement of their wishes and requirements. They were met with something like official sympathy, which might or might not have any validity, but which they themselves interpreted as a presage of success. It might have been expected that they would have promptly followed up their advantage, and that they would have been certainly ready with their proposals in Bill form when Parliament met last week, whether they secured the active assistance of the Irish Government or could only rely on its benevolent neutrality. By not doing so they are throwing away the prestige they won by their victory in 1888. Each year's interval which they allow will make the opposition of their pharmaceutical foes appear

less inconsistent, and will enable the latter body to make it more formidable. The spoiled child of the Empire, however, has a luck which the rest of us never dream of, and it may be likely enough that one fine day the authorities will themselves propose the scheme which the druggists want, but which they seem too apathetic to work for. Meanwhile a powerful champion comes forward to fight on their side in the person of their quondam opponent, the ex-President of the Pharmaceutical Society of Ireland. Elsewhere we publish a copy of a memorandum which Mr. Brunker has addressed to the Attorney-General for Ireland, presenting a succinct abstract of the history of Irish pharmaceutical affairs since the Act of 1875 was passed, and showing the public reasons which exist for making some legislation in the direction of the abortive compromise of 1889 necessary, if there is to be any effective control over the sale of poisons in Ireland. Mr. Brunker's "Memorandum" is hardly likely to be welcomed by his former colleagues of Harcourt Street; but they will be well advised to give it their serious consideration, whether they like it or not. There is only one section of Mr. Brunker's memorandum with which we are disposed to disagree. We should question the historic exactness of his version of the reasons which induced the first Irish Pharmaceutical Council to decide for one grade of pharmacists only; and we do not agree that they "rightly" resolved on this course. But this is of no practical importance, and Mr. Brunker argues with force that now, at any rate, the establishment of two grades is essential. We have maintained this view from 1875 onwards, and shall be curious to see what solid arguments, not prejudices, the actual Council can bring against it. The fact that they have increased their membership by 50 per cent. by their "stone-wall policy" is not, we would respectfully remind them, an argument at all. It is only a manifestation of what their former President designates a "narrow trades-union spirit." We do not doubt that Mr. Brunker's memorandum will have weight with the authorities at Dublin Castle; the druggists have only themselves to thank that it does not appear in support of a Bill *in esse* rather than of one *in posse*.

### A PHASE OF APPLIED CHEMISTRY.

THE condition of chemical research in this country at present is far from hopeless. It may be that in the past we had a greater number of intellectual giants amongst us, and for that reason work which has become historic seems to have been better and more important than that which is now produced. Or it may be that scientific records are somewhat like red-brick buildings, which only acquire their best looks in the course of half a century. There are to-day more workers in chemical research, better facilities for work, and greater necessity for the publication of results than there were fifty years ago. Will not some of that work take rank in the future and become as historic as that of Chevreul, Davy, Rose, or Scheele? There can scarcely be a doubt that it will.

As far as can be judged from current literature, we have now reached a phase in chemical research of which there is no exact equivalent in past records; that is, the care with which workers seek to protect their results. It used to be the case that chemists gave the products of their labour to the world with a free hand; but this philanthropic habit has become a very diminished quantity since the science has been evolutionised into two great departments—theoretical, or non-technical, and applied chemistry. With this evolution there has also come an evolution in its literature; either the results of researches are published through scientific



societies or journals, or they take the form of patent specifications. In the former case the workers deem that their results are of no immediate monetary value or have no technical importance, the consequence being that almost every important advance, every new chemical product, is the subject of a patent. Happily there are a few exceptions; some rich investigators have a love for science for its own sake, and are occasionally philanthropic; but the only hope for getting research of practical importance free to all is to endow it. We have a good example of this in the Research Laboratory of the Pharmaceutical Society. The communication which came from it last week was in certain respects the most important which it has so far produced, and is the best proof of the utility of endowed research. Had the workers been engaged by a firm of manufacturers instead of by an incorporated Society, the simple method which they discovered of doubling the active value of the new antiseptic would have been patented. As it is, the "improvement" is the property of the world at large. And herein lies one of the best arguments for the existence of the research laboratory.

Careful observers cannot have failed to note the great increase in what we may call "patented researches." General chemical literature is beginning to be leavened by it. We note, for example, that the editor of the new "Dictionary of Applied Chemistry" states in the preface to the work that "special attention has been given to the bibliography of the subjects, and in certain cases to the compilation of trustworthy patent lists." This sentence is written by Professor T. E. Thorpe, the director of the Government chemical laboratories at South Kensington. The dictionary is a companion to the new edition of Watts's dictionary; it is a successor, in the technical part, of the old work and of the older Ure's dictionary. Comparing it with these, we see how largely patent literature has become necessary for a correct knowledge of modern technical chemistry. There are few pages in which we do not find that some fact is derived from "Eng. Pat. No. —"; and some departments, such as the synthetical dyes, are almost covered by patent specifications. In periodical literature we find much the same thing; in the societies, especially the Society of Chemical Industry, the trail of the serpent is clearly defined. Authors can scarcely appear before their audience without whispers as to whose axe is now to be ground; their papers often conclude with a sentence to the effect that they have taken the precaution to protect the substance of their papers by a provisional patent; and they are lucky if their rivals in trade, generally present in force, do not discredit their work. These circumstances are well known to those who are acquainted with the inner working of societies, if not to those who rank as outsiders. It is simply impossible for the organisers to get papers if they do not accept those which savour more or less of advertisement, or which are so terribly dry and theoretical that they had better be taken as read. Money is too difficult to make nowadays to permit manufacturers to give their trade secrets to the world at large.

It may be supposed that this phase of chemical science will be short-lived, but it is difficult to arrive at such a conclusion after careful consideration of the facts. Applied chemistry is still in its infancy, and as it grows it must make greater demand upon the only protection which the nation allows it. Some branches, it is true, are conducted without patents. The manufacturers and workers form close concerns from which no secrets leak out; but the day is rapidly passing for this sort of thing. We notice that Sir Henry Roscoe is still eager about his technical education scheme for elementary schools. Sir Henry is a man with too much "grit" in him to give up his scheme. He is educating his

party up to it; he has the sympathy of the scientific world with him, and is slowly converting schoolmasters to his belief that the system of education in our elementary schools "is founded upon mediæval ideas, wholly inapplicable to the wants of our generation." There is much truth in what Sir Henry Roscoe says, and in the present age of reform the revolution of our school system cannot be averted. Hitherto we have insisted that before science is added to the curriculum in elementary schools something must be taken out of it; for it is almost too much for children as it is. That is the doctrine which the chemist-politician now preaches in his article in the *Speaker*. It is to be no plaything which he is to give to schools. "If elementary science is to be introduced," he says, "it must be taught by men who have a thorough knowledge of their subject and have been scientifically trained." If intelligent pupils of such teachers afterwards earn their bread and butter in chemical industry, we shall have no more machine-like workmen, secrets will not be so easily kept, and there will be more need than ever of "protection by letters patent." Hence we think that the phase of applied chemistry to which we have been referring is likely to be a permanent condition.

#### FROM THE FRONT OF THE COUNTER.

In opening his presidential address to the Liverpool Chemists' Association last week, Dr. Symes gave a happy indication of a characteristic which would go some way to account for the success and general popularity which he has attained. In the early days of his business career, he said, he would sometimes place himself in front of his counter and take a look round from a customer's point of view. He would then see little details, empty bottles, small things out of place, or some confusion, which might escape his attention so long as he kept to his usual side of the counter. We do not know why Dr. Symes limited this very sensible proceeding to his "early days," or whether he has really abandoned it in these latter times; but we know enough of his habit of mind to believe that his customers and, whenever he has any, his opponents in pharmaceutical politics can rely on his occasionally looking at things from their point of view. We venture to recommend the practice alluded to, both actually and metaphorically, to the consideration of other pharmacists.

We have the impression that we have seen chemists' shops the principals of which can never have looked at them with the eye of a critical customer; and we have a vague memory of having met pharmacists who seemed quite unable to regard any question or any interest from any other point of view but their own. The faculty of keeping a single eye on one's own affairs is often a valuable one in the attainment of success, but the exact appreciation of an opponent's position is essential to an argument with him, and still more is it desirable to ascertain with precision the condition of mind of the customers on whom we depend. To regard them in any sense as enemies whom we have to overcome and spoil to the utmost extent of our ability is a method of treatment which is, of course, so unreasonable as to be unworthy of serious mention, if it were not that it is in practice, though not in intent, the rock whereon tradesmen have before this wrecked their businesses. A more common error is, we imagine, the too frequent attempt to sell a customer an article other than that he really wants. We have correspondents who pride themselves on their skill in this respect. We do not question that skill, and everyone must exercise his own judgment as to how far it may be exercised with advantage. In the large majority of cases the transaction



between a customer and a tradesman is a perfectly simple exchange of a piece of coin for a certain commodity. The former fully expects that the latter should get a reasonable benefit on the transfer, and he has not, as a rule, the least objection thereto. If the article supplied requires some special manipulation or preparation, involving a certain amount of trained skill, nine customers out of ten are ready to pay the proper fee for such service. Occasionally, too, they obviously want some guidance in regard to the particular article they propose to purchase. They can then appreciate intelligent and disinterested advice. But when they know what they want and ask for it, the cleverness of persuading them to take something else is, to say the least, questionable. Most of them perfectly well understand the game that is being played, and ultimate success is not always assured because no murmur is made.

In pointing the moral of Dr. Symes's illustration, therefore, our purpose is to show that the best policy for any trader to adopt is to so order his establishment and his business procedure as to fulfil as exactly as he can the fair and honest requirements of his customers, with more regard to permanent association than to immediate profit. A shilling gained and a customer lost is a poor sort of bargain, but it is sometimes the result of injudicious smartness. At the same time, we do not forget that a qualified chemist is expected to be something more than a mere distributor of goods, at times. The faculty of discerning opportunities and of making proper use of them is a characteristic of sound judgment, and it is this which is one of the chief factors of success.

### HOW VISCOUS MIXTURES ARE FORMED.

DISPENSERS are familiar with the peculiar change which occurs in certain mixtures, whereby they become gelatinous or ropy. The subject has frequently been discussed in this journal, and in "The Art of Dispensing" the statement is made that "The change appears to be due to the presence of the organism known as the viscous ferment, the cells of which form thread-like groups which ramify through the fluid and make it gelatinous, just as fibrin does in the case of coagulated blood. The development of the organism appears to be due to the presence of nitrogenous bodies." In this connection a research recently made by E. Kramer is of special interest. Hitherto it has been believed that mucous or viscous fermentation was due to an organism which Pasteur named *Micrococcus viscosus*. Kramer doubts the existence of this organism, and gives reasons for believing that there are really three organisms which induce the fermentation, each acting in different media, or solutions of carbohydrates. Thus in neutral, or slightly alkaline, solutions containing saccharose, albumenoids, and mineral salts, the fermentation is produced by *Bacillus viscosus sacchari*, Kramer, which attacks the saccharose. In acid solutions containing glucose, albumenoids, and mineral salts—constituents to be found in all wines—*B. viscosus vini*, Kramer, is the fermentative agent, while in liquids, such as milk, containing lactose, albumenoids, and mineral salts, an unnamed coccus produces the fermentation.

From the nature of the media in which these bacilli act we judge that the third one plays little part in the change which is of most importance to dispensers. *B. viscosus vini* may occasionally find a suitable field of action in medicinal mixtures, but the most frequent assailant will be *B. viscosus sacchari*, which produces viscosity in such mixtures as decoctions of barley, rice, and maize, to which sugar has been added, and in the juices of such things as the carrot and beetroot.

Mixtures containing the substances essential to the life of the bacillus effecting the fermentation set up in the decoctions named are not uncommon. The following is an example:—

Tinct. hamamelis	..	..	..	..	℥40
Ext. ergotæ liq.	..	..	..	..	3j.
Spt. æther. chlor.	..	..	..	..	3j.
Syr. papav. alb.	..	..	..	..	3ij.
Tr. nuc. vom.	..	..	..	..	℥40
Aquæ ad	..	..	..	..	℥viiij.

This mixture when dispensed should be neutral, but if the syrup of poppies has fermented, it is likely that the viscous wine bacillus would attack it in preference to the saccharine one. *B. viscosus sacchari* occurs in the form of short rods, slightly rounded at the ends, which are often joined together, forming strings of as many as fifty. It thrives only in neutral or slightly alkaline fluids, producing no change whatever when free acids are present. It is aerobic, whereas *B. viscosus vini* is anaërobic, and only exists in wines or acid solutions of glucose. To the property of the former of uniting into rods is due the explanation in "The Art of Dispensing" regarding the nature of the viscosity; but this requires correction. In the process of fermentation a mucous substance is formed, having the formula  $C_6H_{10}O_5$ , which, according to Kramer, is metamorphosed cellulose. It is precipitated from the fermented liquid by alcohol, subacetate of lead, and baryta water, in the form of a white, insoluble, amorphous, stringy mass, which is not coloured by iodine, and is dissolved by solutions of the caustic alkalies, forming a yellow liquid, from which alcohol precipitates a compound as a white, scaly mass. It is regarded as a secondary product of assimilation of the ferment. These observations bear out "The Art of Dispensing" recommendation in one important particular, viz., the virtue of alcohol in preventing viscosity; for it is obvious that in its presence the metamorphosed cellulose cannot remain diffused in mixtures, supposing it were formed, which is not likely.

### APOTHEKERS AND DRUGGISTS IN GERMANY.

THE living, or annual return, of the licensed pharmacist in Germany is largely dependent upon the extent to which he monopolises the supply of medicaments, and he is therefore naturally anxious that the legislative protection afforded him shall be as complete as possible. The regulations which have been in vogue up to the present—and which will remain in force for another two and a half months—strict as they are, have not given complete satisfaction—at least, to the "apotheker." They were introduced on January 4, 1875, with the object of protecting the licensed pharmacist from the competition in the retail department of the so-called retail druggists, who correspond in many respects to the druggists and grocer-druggists of England. These regulations were soon found to be defective, and for some years the desirability of revising and strengthening the conditions affecting the sale of drugs and galenicals has been recognised and expressed.

The long-desired reform has at length been undertaken, and the result has been published in the form of an imperial decree, in which "We, William, by the grace of God, German Emperor, King of Prussia, &c.," proclaim to all and sundry those drugs and preparations, the sale of which is to be a monopoly of the licensed "apotheker." These are:—(1) Decoctions and infusions; (2) caustic pencils; (3) extracts or tinctures; mixtures (4) either of salts or powdered substances, or both together, or (5) of liquids, solutions, mixed balsams, honey preparations, or syrups; (6) capsules



of gelatine or starch; (7) confections; (8) liniments; (9) tablets, pills, and granules; (10) plasters; (11) ointments; and (12) suppositories. The only exceptions—*i.e.* the only preparations which may be sold by the unlicensed druggists in each class are:—(3) Tinctures of arnica, benzoin, myrrh, and valerian; extracts of pine, meat, coffee, tea, juniper, acorn-coffee, and malt (pure and with iron, cod-liver oil, or lime); raspberry vinegar, and liquorice juice (both pure and with anise); (4) seidlitz powders; smelling salts; salicylic dusting-powder; and mineral salts, both natural and artificial; (5) camphor, ant, and soap spirits; eucalyptus water; fennel or rose honey; simple fruit juices; Hoffmann's drops; cod-liver oil with peppermint; pepsin wine; simple syrup; (6) capsules containing seidlitz powders; copaiha balsam; cod-liver or easter oil, bicarbonate of soda or tartaric acid, (8) simple liniment, (9) pastilles of mineral salts, peppermint, or chloride of ammonium; (10) cold cream; isinglass plaster; adhesive plaster; corn plasters; lip salve; pitch plaster; mustard leaves and salicylic suet.

These are all the preparations which the druggist will be permitted to keep in stock. The decree further specifies those simple drugs and chemicals which may only be sold in the licensed pharmacy (under the usual conditions and regulations), and the list includes 217 articles, or 74 more than were named in the list of 1875. The additions are largely recruited from the newer remedies, the following figuring in the schedule:—Acetanilide, sclerotinic acid, adonidine, amylene hydrate, antipyrin, anthrarobin, betol, cocaine, guaiacol, homatropine, hyoscine, iodol, kairin, phenacatin, salol, semen strophanthi, soziodol, sulphonal, thiol, urethane, zinc ichthyolate, &c.

The Order is to come into force on May 1, 1890, so that a sufficient time is allowed to the druggists to sell off their stock of the various articles which they will not be allowed henceforth to offer for sale.

Many of the proprietors of these druggists' businesses are fully educated, examined chemists, who have either not been able to afford the time to wait for or the money to purchase a regular licence. This is generally known by the public, who consider that they are therefore likely to be as well served by the one class as the other, while they imagine rightly or wrongly, that at the unlicensed shop they will be able to buy more economically—a consideration of considerable importance to the people of all nations, including the Germanic!

#### COMMENTARY.

**THE GLASS BOTTLE INDUSTRIES, LIMITED.**—This company has not proceeded to allotment, and it is said that the money subscribed is to be returned. Our information is to the effect that the ordinary shares were fully subscribed for, and that the debenture stock was taken up by some of the vendors, but that the preference shares did not meet with as much favour. One of the explanations of the breakdown put forward is that the combination had been worked by the Ashley Company, they only entering after the prospectus had been put out. Then some of the other directors rebelled, thinking the Ashley Company's terms too high. It is stated as probable that a new combination will be formed shortly.

**THE MEDICAL CURRICULUM.**—There is to be serious opposition, it is said, to the proposal of the Education Committee of the General Medical Council "to fix the period of study required to obtain a registrable qualification at five years." The objections come mainly from the Scotch and Irish Colleges and the Apothecaries' Hall, the students

objecting to being compelled to undergo the expense of an additional year's study. When the Council meets again the matter will be fully discussed in the light of stirring protests from several quarters.

**REGULATING PRICES.**—Consequent on Messrs. Elliman's letter in our last, a correspondent in the North of London has sent us some particulars of a case of cutting their article which occurred, he said, about three months ago. We have had the opportunity of alluding to the case to Messrs. Elliman, and they say, naturally enough, that they could not investigate an event so far back. They say cutting sales have been reported to them and price lists sent in confirmation from time to time, and they have ascertained in many cases that the agreement had been signed since the issue of these, and sometimes that the quoted price had been qualified by a notification. They find that wholesalers are getting to understand that they are serious, and they tell us of several instances of large vendors who have held out, but are now agreeing to their conditions.

**DUBOISINE AND HYOSCYAMINE.**—Scherings, of Berlin, in a letter to their London representatives, write:—"We worked recently a quantity of Duhoisia leaves for duboisine, which we obtained as a pure base in form of a brownish thick liquid. The sulphate which we obtained from it—that is, the sulphate of duhoisine—corresponded perfectly and in all respects with hyoscyamine sulphate. According to this, the statement of Ladenburg is confirmed. We obtained the hyoscine from the mother liquor, not only of the duhoisine sulphate, but also of that of the hyoscyamine sulphate, which we had obtained from helladonna root." As it has been elsewhere stated that it is hyoscine which duboisine resembles, this communication is noteworthy.

**EXALGINE.**—Since the introduction of this analgesic by Dr. Dujardin Beaumetz little attention has been given to it in this country, probably because of its close relation to acetanilide (antifebrin), and the satisfaction which that remedy has given. But some light has been thrown on the distinctive merits of exalgine by Professor T. R. Fraser in a clinical lecture delivered at the Edinburgh Royal Infirmary. Professor Fraser never commits himself about a thing until he is sure, and that fact adds value to his opinions on exalgine. Methyl-acetanilide, or exalgine ( $C_9H_{11}NO$ ) occurs in colourless needle-shaped crystals, which have a faintly aromatic odour and a slightly pungent taste. It is nearly insoluble in water, but is freely soluble in rectified spirit, and even in dilute alcohol. Professor Fraser finds that from 16 to 20 grains may be dissolved in  $\frac{1}{2}$  drachm of rectified spirit, and that this solution may be diluted with 3 or 4 oz. of water, and still remain perfectly clear. As a solution so made, and containing  $\frac{1}{2}$  grain or 1 grain in a teaspoonful, has but little taste, it is generally used without the addition of any flavouring agent. Professor Fraser has used the remedy in doses of  $\frac{1}{2}$  grain, frequently increased to 1, 2, 3, and 4 grains, but seldom exceeding 14 grains per day, this quantity not inducing any bad results. The notes of the cases of neuralgia, &c., in which exalgine was used show that in about ten minutes after the dose was administered relief was obtained. It was attempted to relieve pains of various kinds with the drug, but, as was to be expected, it failed in some instances, succeeding, however, in a wonderful manner in facial and other neuralgias, sciatica, toothache, cardiac angina, and even in one case of pleurisy. Doubtless the result of Professor Fraser's observations (which are fully reported in the *British Medical Journal*) will be a demand for exalgine, and we may repeat that the doses which are most to be relied on are  $\frac{1}{2}$  and 1 grain.





*The Microscope in the Brewery and Malthouse.* By C. G. Matthews, F.C.S., &c., and F. E. Lott, A.R.S.M., &c. London: Benrose & Son. Large 8vo, 212 pp. Price 21s.

THIS work may be said to have a value outside the special industry for which the authors have designed it. The substance of the volume was originally given as a course of lectures to young brewers at the principal seat of the brewing industry in this country, and in the form of the handsome volume before us the lectures will appeal to all who are interested in fermentation. Brewing now takes rank as a distinctly scientific occupation. Once upon a time it was not so; traditional methods held sway, and rule of thumb dominated all that was done in the production of the "poor man's beer," but since Pasteur's classic research on fermentation—a research which took that world-known chemist into a channel of investigation which has been productive of the greatest good to mankind—those who aim to produce malt beverages cannot ignore the microscope as an aid to their work. Moreover, the study of chemistry has become imperative in the brewing industry. Some of our most accomplished chemists are connected with it, and it is a notable fact that the great enhancement of our knowledge of starches and sugars which the past ten years have seen is very largely due to the perseverance and skill of the chief chemist to Bass & Co.

"The Microscope in the Brewery and Malthouse" is a somewhat modest title for Messrs. Matthews and Lott's book. The first two chapters are, it is true, wholly devoted to the mechanical arrangements and manipulation of the microscope, and in the appendix there are many valuable hints to the microscopist, but the remaining ten chapters in the book are a combination of bacteriology and brewing which reflects much credit upon the authors. We naturally find a succinct description of the life-history of yeast (*Saccharomyces cerevisia*); but that is by no means the only organism which is found in beer-worts, and it is to the description of the others that much of the volume is devoted. Moreover, all the materials which are used in brewing are dealt with chemically and microscopically. How the authors treat their subjects may be judged from this quotation from the paragraphs on hops:—

"The oily and resinous contents [of hop glands] include the hop oil or aroma, hop bitter proper, resin, fat, and astringent matter of the nature of tannin. As hops 'age' the contents of the capsules become gradually less oily and more highly coloured, till at length, in hops that are two or three years old, only hard dark-coloured matter is left, where formerly was a golden oily substance . . . Most hops . . . show bacteria, crystals (probably malate and oxalate of lime), cells of saccharomyces, infusoria, and protococcus. Many samples yield mould spores, and some few show these last in considerable profusion."

It will be seen from this quotation how innocently the brewer imports enemies into his brewing-vat—in fact, in grain, water, and everything which he uses, an enemy to the simple alcoholic fermentation lurks. Those who are desirous of knowing the effects of these enemies, how to counteract them, and all that should be done to brew scientifically cannot do better than consult Messrs. Matthews and Lott's volume. It is splendidly got up, and is specially rich in well-executed illustrations.

*A Handbook of Quantitative Analysis.* By John Mills and Barker North. London: Chapman & Hall (Limited). 8vo., 220 pp. 3s. 6d.

THIS handbook is an expansion of the smaller "introductory lessons" which we reviewed recently. It will be remembered that the lessons treated of gravimetric and volumetric analyses—substantially with the principles upon which commercial quantitative analysis is based. The present volume deals with the analysis of alloys, minerals, ores, and the assaying of gold and silver, with the

analysis of such substances as bleaching powder, alkali, and soap, water and gas analysis, and ultimate organic analysis. It could not be possible in such a handbook as this to treat so many subjects—widely different subjects—with completeness. Nor have the authors attempted this. They have written for students, not for specialists, and on the whole they have succeeded in producing a useful volume. Chemists and druggists who do not have the necessity for special treatises in each of the departments which we have mentioned will find this book a useful one to have.

*A Manual of Materia Medica.* By John M. Maisch, Ph.M., &c. Fourth edition. Philadelphia: Lea Brothers & Co., 1890. 8vo., 539 pages and 259 illustrations.

It does not seem long ago since we had the opportunity of expressing a favourable opinion of the third edition of this excellent student's manual of materia medica. As it happens to be one of the best manuals of its size in the English language, we cheerfully welcome this fourth edition. It is essentially a revised edition, not an enlarged one, for the couple of new illustrations, and the few fresh pages of matter, have not added materially to its bulk. But a close comparison of the two editions enables us to say that the author has brought it up to date in a thorough manner. He has succeeded, in short, in keeping pace with the researches and improved pharmacognosy of the past three years, and has embodied in the book a triple essence of all that is valuable, without detracting from its value as a text-book. This is a rare virtue in advanced teachers. They show a disposition now and then to forget that students must know the oldest facts before they imbibe the new. Not so Professor Maisch. Apart from this, the manual has undergone a few small but important changes, such as the arrangement of drugs according to origin on the "Genera Plantarum" system; antidotes are given to poisonous drugs; we observe a number of useful alterations under essential oils; some additional practical matter under fixed oils, and several slips of previous editions have been removed. Perhaps the best feature of the book is that it is not "adapted" to any particular pharmacopœia, so that it is as well suited for the English student as for the American.

*The Surgical Treatment of the Common Deformities of Children.* By Walter Pye, F.R.C.S. Bristol: John Wright & Co. 8vo, 216 pages and 80 illustrations.

THIS is a thoroughly practical work, dealing with a most pitiful group of human afflictions. If there is anything which we have to thank modern surgical art for it is the large measure of relief it has afforded to young sufferers from deformity, and the hope of their growing up to manhood and womanhood with some prospect of being like their more fortunate fellows in form and comeliness. Mr. Pye's book contributes largely towards this end, and it is all the better for being graphically written and so well illustrated.

*Proceedings of the American Pharmaceutical Association.* Vol. xxxvii. Philadelphia: 1889.

IN addition to a 306-page report of the proceedings of the associations meeting at San Francisco, this volume contains 433 pages of a report on the progress of pharmacy from July 1, 1888, to June 30, 1889, this part being written by Mr. C. Lewis Diehl. The volume extends to 850 pages. In many respects the "Proceedings" is a typical work of reference, and we can say of Mr. Diehl's section of it that, for general usefulness, and conciseness and lucidity in abstracting, it reaches the high-water mark of year-book literature.

*Hints on Nursing.* By Mena Drew, with introduction by Dr. H. A. Allbutt. London: R. Forder, 28 Stonecutter Street. Pp. 72. 6d.

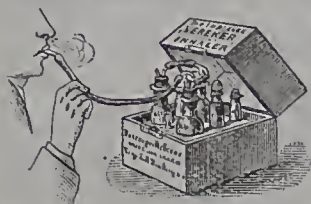
MISS DREW has been a hospital and a private nurse. She appears to have acquired a sound knowledge of her profession, and is certainly able to impart her instructions in terse, clear language. Her little manual is an excellent guide to women, all of whom ought to have at least some skill in nursing.



## Notes of Nobelties.

### THE "VEREKER" INHALER.

"THE only fault we had to find with the Vereker inhaler," said one of Messrs. Burroughs, Wellcome & Co.'s young men to one of ours, "was that when you wanted to take it to the Continent with you you felt inclined to take a boy to carry it. We do away with that probability now, and greatly enhance its portability, by putting it up in this very compact form." A neat little case, just about 6 inches each way, was produced; it was nicely covered with claret-coloured leatherette, and had a pretty nickel-silver lock. The illustration shows the internal arrangement. "This looks better, certainly. Have you raised the price?" "No; we charge the old price only. Dr. Murell was so taken with this new size that he has figured the inhaler in his latest book."



### THE LACTOTHERME.

AN ingenious little apparatus has been added to the sundries' list of Mr. William Toogood, of Heddon Street, Regent Street, under the name of "Lactotherme." The apparatus consists of a small portable brass stove, 8 inches high by 4 inches wide, which is shown closed in the accompanying illustration (fig. 1). At the bottom of the apparatus is a small

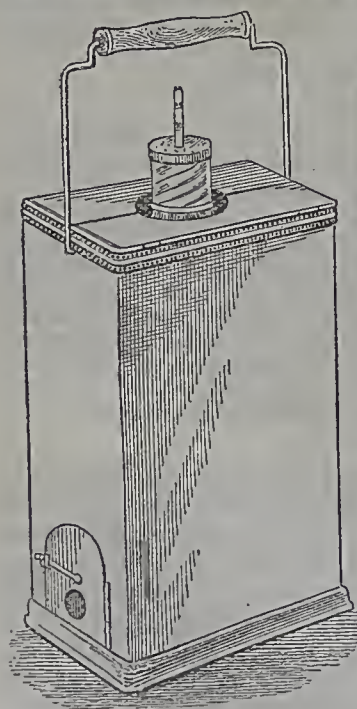


Fig. 1.

compartment, heated either by means of a carbon block, or, on a more old-fashioned principle, by a floating wick and oil. A box of ten carbon blocks and one of floating wicks are included with each lactotherme. If carbon blocks are used they should be placed on a small grill, while for the floats a tin receptacle is provided. The upper and larger compartment is lined with felt, and serves as a receptacle for the feeding-bottle (the apparatus is primarily intended as an appanage of the nursery); but it may also be used conveniently for

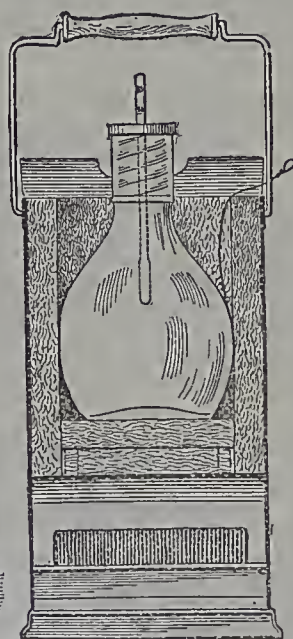


Fig. 2.

the preparation of foods for invalids and travellers. When the feeding-bottle is being heated its tube is replaced by a thermometer, included in the apparatus, which indicates the degree of heat to which the milk should be warmed. When that degree is reached the thermometer may be replaced by the ordinary tube, the lids are closed, and the food within will be kept hot for a long time. The carbon blocks burn about seven hours, and the floating wick nine. The lactotherme may be had in japanned iron, brass, or nickel-plated.

## Trade Notes.

THE directors of the Salt Union (Limited) recommend a dividend at the rate of 10 per cent. per annum for the last half-year, carrying forward 41,000*l*.

THE SANITAS COMPANY (LIMITED) recommend a final dividend of 5 per cent. (tax free), and the addition of a sum equal to 2½ per cent. on the paid-up capital to the reserve fund.

MESSRS. BURROUGHS, WELLCOME & Co. expect in the course of a few days to have arrangements complete for the manufacture of their tabloids of salicylic acid, and salicylate of soda from the physiologically pure acid, and in future will only supply such tabloids. They purify the acid themselves, they tell us.

CLARKE'S PYRAMID AND FAIRY LIGHT COMPANY (LIMITED), Cricklewood, N.W., have been appointed sole agents for the "Sacosa Plate Powder," an article possessing genuine merit, and which has a large sale throughout the United States of America. The proprietors are the well-known wholesale druggists Messrs. Coffin, Redington & Co., New York.

WE have received a copy of the second edition of Dr. M. K. Hargreave's "Practical Manual of Venereal Diseases" (London: R. Kimpton, 126 Wardour Street). The author informs us that the long delay in the production of this edition, which has been complained of by many subscribers to this journal, has been occasioned by a misunderstanding on the part of the printer which necessitated a second printing. Much of the text has been rewritten.

REPORTED SALE OF MR. MERCK'S NEW YORK BUSINESS. — A report was current in drug circles in New York a few days ago that an English syndicate had made overtures to buy the New York house of Mr. E. Merck, of Darmstadt. The New York manager, Mr. Theodore Weicker, who is also a member of the firm, was seen by a representative of the *O. P. & D. Reporter*, and admitted that he had been approached by a syndicate with offers to buy, but stated that he had positively refused to entertain their proposition.

THE RUNCORN SOAP AND ALKALI COMPANY. — The annual meeting of the shareholders of this company was held in Liverpool on February 10. The report for the past year expressed regret at the result of the working, which, however, had been carried on under exceptional circumstances. The net profit for the year had been 963*l*. 16*s*. 9*d*., and the balance from last year, 5,864*l*. 16*s*. 7*d*., being added to this, made 6,827*l*. 13*s*. 4*d*. as the present available surplus. It was proposed not to pay a dividend, but to carry forward the whole sum. The report was adopted.

THE Chesebrough Company, 42 Holborn Viaduct, send us a pamphlet, entitled "Pure Air or Poison," written by Mr. Charles F. Wingate, an American sanitary engineer. It is a particularly able exposition of the principles on which the heating and ventilation of rooms and houses should be carried out. We gather that the Chesebrough Vaseline Company are allied with a "Chesebrough Heating and Ventilating Company" in New York, and that Mr. Wingate has found their apparatus answer his scientific requirements. The essay is not the less interesting because its object is, as we presume, to advertise a particular apparatus.

THE CIVIL SERVICE CO-OPERATIVE SOCIETY (LIMITED). — The directors' report of the business of this concern last year shows that purchases during that period amounted to



405,752*l.*, and sales to 481,120*l.* The value of the trading stock on December 31 was 113,791*l.*, and the net profit (after appropriating 1,474*l.* for fittings) 16,647*l.* They propose to pay to shareholders the maximum dividend of 5 per cent., free of income-tax, which will absorb 5,000*l.*, and to set aside 4,000*l.* to the leasehold premises redemption fund, 3,000*l.* to the auxiliary insurance fund, and 250*l.*, as usual, to the provident fund, leaving 7,188*l.* to be carried forward.

MESSRS. FITZSIMMONS & FEARNLEY, of Port Street, Manchester, send us a bottle of ginger-ale made from the soluble essence which they offer to the trade. The ale is a delightful beverage, of good aroma, free from any sharp initial pungency, but leaving a refreshed feeling on the palate, as well as being generally of a warming character. The beverage is perfectly bright, and has not lost that character after being kept in a warm room for a fortnight. It would appear, therefore, that the essence from which the ale is made is possessed of merit which warrants a trial of it by those who have not had dealings with Messrs. Fitzsimmons & Fearnley.

MESSRS. BRUNNER, MOND & CO. (LIMITED).—The balance-sheet for the half-year ending December 31, 1889, has just been issued by the directors of the above company, and will be presented to the shareholders at a meeting to be held in Liverpool on February 20. The accounts show a profit on the working of the half-year of 120,639*l.* 16*s.* 10*d.*, which, with the amount of 15,734*l.* 15*s.* 1*d.* brought forward from the previous half-year, makes a total of 136,374*l.* 11*s.* 11*d.* The directors propose to distribute the full dividend on the preference capital of 350,000*l.*, and a dividend on the ordinary capital at the rate of 30 per cent.; 2,500*l.* is to be written off patents account, and 20,000*l.* placed to suspense account, which will leave 13,805*l.* 16*s.* 11*d.* as balance to be carried forward. The directors propose again to place to suspense account a sum of 20,000*l.*, towards meeting the cost of the remodelling of a portion of the plant, which is in progress. The directors who retire by rotation are Mr. Henry Brunner, Mr. Holland, and Mr. Galloway, all of whom are eligible for re-election. The property of the company is valued at 1,280,634*l.*, which includes 624,343*l.* as the estimated value of the alkali-works at Winnington and Sandbach, 211,446*l.* for land, houses, brine-shafts, salt-works, &c., and 124,856*l.* for rolling-stock, barges, products, &c. The company appears to be worked with great economy, as out of an expenditure of 131,486*l.* 16*s.* 1*d.* the directors' salaries amount only to 3,100*l.*, and the office salaries and auditing to 2,565*l.* 19*s.* 3*d.*

THE LONDON PRODUCE CLEARING-HOUSE (LIMITED).—The third general meeting of this company was held on Monday at the City Terminus Hotel. Mr. F. J. Johnston presided, and, in moving the adoption of the report, observed that the principles of the company's business were now more generally understood and more fully appreciated, as was shown by the increasing volume of their contracts for coffee, sugar, and tea. In wheat and maize, their two latest introductions, the business so far had been insignificant, there having been apparently no reason for speculation in these articles. The business of the company was not to make speculation, but to regulate and keep it sound in the interests of legitimate trading, by which means they might be sure the most solid operators would be brought into the market. Their charges were now only 47 per cent. of their earnings, against 57 per cent. in their preceding accounts, a reduction which they hoped to see increased as their business developed. During the eight months under review their guarantee contracts had represented a value of 36,000,000*l.*, against something over 22,000,000*l.* in the previous twelve months, or in the twenty months since the company began business a total of 58,000,000*l.*, of which all but about 60,000*l.* had now been liquidated. No better proof of the soundness of their system could be given than the fact that, in securing to the trade the due fulfilment of these contracts for 58,000,000*l.*, the loss of the company had been limited to 343*l.* This result was the more striking when it was remembered that in both coffee and sugar there had been very large and sudden fluctuations in prices. With this almost entire absence of loss and so large a turnover their earnings might seem small, more especially when it was mentioned that they had paid to the brokers about 50,000*l.* in the eight

months, or at the rate of 75,000*l.* per annum, against about 30,000*l.* in the previous twelve months. They had, however, laid it down as a principle that their tax on trade should be as light as possible, and that they must look to the magnitude of their operations as the surest and soundest means of securing to the shareholders a full and permanent return on their capital. Their desire was to build up a system which would be of real use to commerce by giving merchants a free and ready market, and thus bring business to the port of London and increase its activity as a *dépôt*. Passengers moving from one part of England to another often found it much more convenient to take the longer route *via* London owing to its much better travelling facilities, and there was good reason to hope that foreign merchandise might do the same to a very considerable extent if London's great financial resources were assisted by a ready market, and provided, of course, trade were not hindered by prohibitory dock and labour charges. The report was adopted, and a resolution afterwards passed declaring the dividend recommended—viz., 6 per cent., or 5*s.* per share.

## NEW COMPANIES.

THE ST. JOHN'S PANDERMIC OINTMENT COMPANY is announced, with a capital of 10,000*l.* It is projected to take over the manufacture and sale of an ointment which Mr. John Russell, of St. John's, Sutton-at-Hone, Kent, has for thirty years been supplying gratuitously for skin-diseases, but for the formula of which the company is to pay him 1,200*l.* He, with Mr. W. May, St. Mary Cray, and Mr. T. Batten, Foxdene, Chislehurst, are named as the first directors.

I. LEVINSTEIN & CO. (LIMITED).—This company, as stated in our issue of February 1, has been formed with a capital of 150,000*l.*, in 10*l.* shares, for the purpose of acquiring the business of manufacturing chemists and colour manufacturers carried on by Ivan Levinstein & Co. The first subscribers are:—I. Levinstein, Minshull Street, Manchester, chemical manufacturer; R. Mitscherlich, Levenshulme, clerk; H. T. Böttinger, Elberfeld; F. Bayer, Elberfeld; F. C. Dursberg, Elberfeld; G. W. Fox, Princess Street, Manchester, solicitor; C. A. Martius, Ph.D., Berlin; L. Schad, Ph.D., Berlin; F. Oppenheim, Ph.D., Berlin. So long as shares to the nominal value of 49,000*l.* are held by the Farbenfabriken, vormals Friedr. Bayer & Co., and similar amounts by the Actien Gesellschaft für Anilin Fabrikation, and by Ivan Levinstein, each may appoint a director, and until three directors are thus appointed Messrs. I. Levinstein, H. T. Böttinger, and C. A. Martius are to be directors. Mr. Levinstein is appointed managing director, and for every year in which the profits do not exceed 5 per cent. shall not be entitled to any remuneration, but for every additional  $\frac{1}{2}$  per cent. or fraction of  $\frac{1}{2}$  per cent. over 5 per cent. up to  $7\frac{1}{2}$  per cent. he will be entitled to 300*l.*, and to 100*l.* for each additional  $\frac{1}{2}$  per cent. over  $7\frac{1}{2}$  per cent. In calculating yearly profits for this purpose, depreciation shall be allowed for at the rate of 5 per cent. on buildings, and 10 per cent. on machinery.

"HE won't be happy till he gets it" is being executed in postage-stamp size, with as many colours as the original. They will be Pears-ed in the same way as the stamps also, we suppose.

THIS IS A PRESCRIPTION which one of our subscribers in the West-end of London has recently dispensed:—

Although reduced in size, the difficulty of deciphering the scrawl has not been increased.



## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, at any time within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

*From the "Trade Marks Journal," January 29, 1890.*

Various picturesque designs illustrating Buddhist objects; also sketch of two birds; also designs with female figures in Eastern costume; also sketch of camel and rider, on oblong labels; for chemical substances, aniline dyes, and raw or partly-prepared vegetable, animal, and mineral substances. By the Actien-Gesellschaft für Anilin Fabrikation an der Treptower Brücke, Berlin. 93,159, 93,937, 93,938, 93,947, 93,951, 93,952, 93,956, 93,970.

"ALBUMIGUM"; for a thickening compound in food; also a compound for stationery purposes. By Kay Bros. (Limited), St. Petersburg Mills, Stockport. 93,206, 93,207.

"CAPITAL BRAND"; for glueose, liquorice, gelatine, &c., used as food. By Tolmé & Runge, 16 Mincing Lane, London. 93,502, 93,503.

"BLA-CUR-EX"; for goods included in Class 42. By James Pascall, 25 Valentine Place, and 100 and 101 Blackfriars Road, London. 94,221.

"PARRAKEET"; for perfumery, &c. By J. Scott, 79 Bridge Street, Warrington. 92,961.

"ORMOLEINE"; for furniture polish. By Ormoleine Company, Newcastle, Stafford. 91,695.

"RUMOND"; for furniture polish. By John Simpkins, 33 Hyde Street, Winchester. 93,794.

Sketch of chariot, horses, and driver; for plate powder, polishing fluid, &c. By Hollis & Son, 14 Old Street, E.C. 94,245.

*From the "Trade Marks Journal," February 5, 1890.*

"ALBUMIGUM"; for a compound used for adhesive, sizeing, glazing, &c. By Kay Brothers (Limited), St. Petersburg Mills, Stockport. 93,205.

Picturesque sketch with lion, lioness, and cubs in foreground; for chemical substances. By Leopold Cassella & Co., Frankfurt-on-Maine, Germany. 93,687.

"PEACOCK BRAND," and picture of a peacock; for chemical substances, and for raw or partly-prepared vegetable, animal, and mineral substances used in manufactures. By Griffiths Brothers & Co., 29 Macks Road, Bermondsey. 93,783-93,784.

"PEOTAKOS"; for a medicinal preparation for coughs, bronchitis, &c. By E. Jones, Medical Hall, Miles Bank, Hanley, Staffordshire. 93,710.

Sketch of serpent forming letter "S," with the letters "E J.," for all goods in Class 4. By E. J. Scott, 169 Preston New Road, Blackburn. 94,118.

"STICKPHAST PASTE," with sketch on bottle, and wording; for paste. By Field & Tuer, 60 Leadenhall Street, E.C. 93,873.

Sketch of the mountains of the world, showing their relative heights, shining sun, and flagstaff with banneret; for food substances. By Payton & Co., Tower Hill Warehouse, E.C. 89,491.

Sketch of "MASTER HUMPHREY'S CLOCK"; for baking, egg, and custard powder, condiments, &c. By Humphrey & Co., 133 Chatsworth Road, Lower Clapton, Middlesex. 94,028.

"SUNNYCRO"; for food substances. By Exell Brooks & Co., Garden Street, Withy Grove, Manchester. 94,034.

Picture of swan on circular black label, with the word "Purity"; for food substances, and for blue, soaps, starch, and oils, &c. By H. Gill and R. Ridehalgh, trading as H. Gill & Co., Neal Street, Bradford. 90,040-90,041.

Picturesque sketch of walk on Richmond Hill, with female figure; for food substances, and for soap, detergents, oils, &c. By Leach Brothers, George Street, Richmond. 94,307-94,308.

Design of mail-clad figures, with coat of arms on oval label; for aerated waters. By Forfarshire Aerated Water Company, 1 Commercial Street, Dundee. 81,901.

"HARRINGTON"; for mineral waters. By Harry Cogill, Southend, Essex. 90,853.

"T. P." and other words on circular label. By Thomas Pett, Church Street, Chatham. 93,201.

Sketch of soap tablet; for perfumed soap. By R. Weaver, 24 High Holborn, Middlesex. 93,408.

Sketch of three children and dog, with wording on black shield; for a hair-wash. By F. J. Bothams, 4 Blackmoor Street, Drury Lane, W.C. 93,790.

Picturesque sketch of Niagara Falls, with American and English coat of arms, and wording; for a preparation for the hair. By W. P. Hey, Crosby Terrace, Crosshills, Keighley. 94,082.

*From the "Trade Marks Journal," February 12, 1890.*

"FOX," and sketch of running fox; for fusible mineral cement. By Fox & Williams, 15 King Street, Chester Road, Manchester. 94,298.

"CASTLE RELISH," with representation of a castle, and wording on square label; for a sauce. By Wilkinson & Simpson, 24 Newgate Street, Newcastle-on-Tyne. 92,973.

"SIM NEL'S"; for baking powder, &c. By J. Pennington, 49 Clerke Street, Bury, Lancashire. 93,735.

Sketch of a bow and arrow, with the word "Ness"; for mineral and aerated waters. By James Bowness, Shawclough, Newchurch, Lancashire. 88,182.

*From the "Trade Marks Journal," February 19, 1890.*

Designs on label of a bear holding shield, with monogram and wording; also sketch with bison bull in foreground; for chemical substances used in manufactures, &c., and for vegetable, animal, and mineral substances. By the Actien-Gesellschaft für Anilin-Fabrikation an der Treptower Brücke, Berlin. 93,162, 93,164, 93,170, 93,171, 93,935, 93,936.

"BARTHOLOMEW RED"; for pigments. By T. Wildash & Sons, 66 and 67 Bartholomew Close, London, E.C. 94,342.

"ANTIENZA"; for medicines and other articles in Class 3. By W. J. Lancaster, Colmore Row, Birmingham. 94,626.

"TCHADUNA," with signature, on label; for medicines for human use. By W. H. Millard, 13 Zinzan Street, Reading. 94,694.

"ECLIPSE"; for articles for food. By J. S. Parker and L. S. Parker, trading as Parker & Sons, Wymondham, Norfolk. 82,002.

"BEEF BOUILLON," "B.B.B.," and other wording; for an article of food. By Barrett's Brewery and Bottling Company (Limited), 87 Wandsworth Road, London. 93,872.

"DAGMAR"; for food substances. By Thos. Nesbitt & Co., Hibernia Chambers, London Bridge, Southwark, S.E. 94,394.

"C. S. L." as monogram, and wording; for mineral and aerated waters. By Samuel Cleaver, Wharf Street, Leicester. 93,857.

"FOR SUPERFLOUS HAIR," with portrait of a man's head, and various wording; for toilet soaps and preparations, &c. By J. H. Woodbury, West Forty-second Street, New York. 94,283.



## AT THE COUNTER.

**PHONETIC.**—A representative of this journal called on a chemist in the Black Country a short time since. A girl about 14 years old came in the shop and asked for "a syphon and a bladder on a plaster." Our man knew what the syphon meant, but he watched eagerly to see what the other thing was going to be. When the assistant had smilingly served a belladonna plaster, and was complimented on his discernment, he said he had a note the other day asking for "holy files," for which he had supplied olive oil.

**MR. VICTOR L. A. DESCHAMPS**, of Kingston, Jamaica, sends us some specimens of native orders, but they do not differ much from those sent to pharmacists by illiterate natives of this country. One says:—"Sir Please give the Bearer 1½ in Porouse placer wat we call Streanking Plaster the read coine for Pain." Another is as follows:—"Sasafox Chip 3d. niger vity chip 3d. Polia ch 3 Gumayur Cum 2d. Snake root 2d."

Two incidents reported from Cardiff:—Lady Customer: "Please a pennyworth of camphor. I have just been to see a dead body, and smelt her breath." Little Girl: "Please I want a pen'north of colza oil and pen'north of pills for working a magic-lantern."

A **CHEMIST** near the Borders sends the following order he received lately, which seems to be genuine:—"An old coch's police plesture for a broken rib at 6d."

A **YORKSHIRE** chemist reports the following incident:—A woman came for some venice turpentine for her husband, who had a pain in his back. She made him some pills, and afterwards thought "what was good to take must be good to rub with," so proceeded to rub it well into his back (the venice turpentine being rather thin). You may judge the consequences when she tried to wash it off.

**RAD. GENT.** (235/66) sends the subjoined specimens of orders received "behind the counter" in Lancashire:—High dried pot ash. Efferance tarterine. Spirits lodlam. Spirits archorn without oil in. Cincric of iron for tooth ache. 1 peneth canverated oil. Choric ruther. Tincue of merr. Heppy wine. Iapuan wine. 1 pennyworth heather. 2 peneth hassefety. Loaf borokes. If it will hold 2 ounces of cordial send two and if won't hold two ounces you must send one. It has a tooth through, but its gathered all round and its tongue is all blisters on.

THIS is how they order them in the West of England:—Polyanthns water (Apollinaris), magnified fluid, salts of sorrow, harmonium, Saddler's pouthier (seidlitz), blue urchin (blue nction), berget herry, 1d. Peters skin (G. P. skin), absent salts, diabolic lotion (carbolic lotion), the cognac to mend flags (coaguline).

A **KENT** collection of curiosities sent to us contains the following curiosities:—Terra cotta acid for cleaning white hats; violet logwood for the sweetness of breath; cats pivot oil for deafness (? ol. cajuputi); isle gupiter; hoddieglone; smiling salts; acivity; penneth the soap and linen mint for a soar throat; kelsertine magnishor; pelecscrutcher; scence of armonds.

FROM a collection sent us by a Scotch subscriber it appears that several North British customers nationalise a popular preparation into "Citric McNeashie." The accent lingers in an order for "box hailing saw," and "3d. Aiden." "Half mushkin cod-liver oil" is no mystery to a Scot, but might be to a Saxon. "Cat-a-que" is phonetic enough, but "March ment lightment" and "flags lint," when queerly written, need a moment's thought.

## WILLS OF DECEASED CHEMISTS.

THE will, dated July 28, 1888, of the late Mr. John Barclay, of Falmouth, who died on October 27, 1889, has been proved at the Principal Probate Registry by the sons and executors, Messrs. John Henry, Robert Grenfell, and Charles Barclay, to whom the testator leaves 100l. each. To his other children he leaves an immediate legacy of 50l. each. He makes provision for paying an annuity to a sister-in-law, and bequeaths the residue of his property, real and personal, between his children. The gross personal estate amounted to 15,004l. 5s. 11d., and the net to 7,045l. 3s. 8d.

The will, dated September 1, 1888, of the late Mr. H. J. Blackburn, of Southport, retired chemist and druggist, who died on December 5, 1889, has been proved at Liverpool by Mrs. Amelia Blackburn, the widow, and Mr. T. Daniel, the executors. The gross personal estate amounted to 454l. 13s. 9d., and the net to 185l. 8s. 6d. The testator gives his furniture and household effects to his widow, and leaves the residue of his property, real and personal, to his executors in trust for the benefit of his widow and daughter.

The will, dated March 7, 1889, of the late Mr. John Bradshaw, of Adlington, Lancashire, chemist and druggist, who died on April 23, 1889, has been proved at Lancaster Probate Registry by the widow, the sole acting executrix. The gross and net value of the personalty amounted to 231l. 4s. 9d. The testator gives and devises all his estate, real and personal, to his widow, for her and his two children's joint benefit, directing her to carry on his business so long as she thinks desirable.

The will, dated October 3, 1888, of the late Mr. John Henry Elmitt, of Horncastle, chemist and druggist, who died on December 10, 1889, has been proved at Lincoln Probate Registry by Messrs. O. M. Hodgett and J. H. Ranby, the executors. The testator leaves his furniture, plate, pictures, and household effects, with a legacy of 100l., to his wife. The residue of his estate, real and personal, he leaves in trust to his executors, for the benefit of his wife for life, with remainder to his children. The gross personalty amounted to 1,234l. 8s. 1d.

The will, dated June 26, 1886, of the late Mr. J. T. Horner, of Godstone, Surrey, who died on September 30, 1889, has been proved at the Principal Probate Registry by the executrix, Mrs. Mary Horner (the widow), to whom the testator devises and bequeaths all his property, real and personal, absolutely. The gross personalty amounted to 68,126l. 3s. 11d., and the net to 64,740l. 8s. 10d.

The will (dated October 31, 1874), with a codicil (dated April 22, 1886), of Mr. Charles Noyce Kernot, M.D., formerly of Calcutta, and late of Bishnanth House, West Brighton, who died on September 5 last, was proved on January 31 by Charles Kernot Butt and Mrs. Addaline Lætitia Frances Kersey Kernot, the widow, and acting ex-cutors, the value of the personal estate amounting to over 53,000l. The testator bequeaths 200l. and the furniture and effects at his residence to his wife; an annuity of 300l. to his sister, Jane Anne Newman; an annuity of 100l. to his brother, William Pearce Kernot; 1,000l. each to his goddaughter, Clara Louisa Kernot Butt, and Francis Charles Butt, and other legacies. The residue of his real and personal estate he leaves, upon trust, for his wife, for life, and then for all his children, in equal shares.—*Illustrated London News*. Dr. Kernot was the principal in the firm of Smith, Stanistreet & Co., chemists and druggists, Calcutta.

The will, dated March 24, 1877, of the late Mr. J. B. Marsden, of Kingston-upon-Hull, chemist and druggist, who died on October 17, 1889, has been proved at York Probate Registry, by Mrs. Mary Marsden, the widow and sole executrix, to whom the testator bequeaths and devises the whole of his estate both real and personal for her absolute use. The gross personalty amounted to 274l.

Letters of administration of the personalty of the late Mr. Solomon Perry, chemist, of Tavistock, who died intestate on August 21, 1889, have been granted at Exeter Probate Registry to Mrs. Eliza Perry, the widow. The gross value of the personalty amounted to 758l. 14s. 4d., and the net to 650l. 12s. 2½d.



## Trade Report.

**Notice to Retail Buyers:**—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollected that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., February 20.

**T**HERE appears to have been more life in our markets during the last few days, and the principal alterations this week are in the direction of higher prices. The drug auctions to-day passed off with a much better tone than has been observed lately, and a large proportion of the goods offered changed hands, although no material alterations were established. The following is a synopsis of the week's movements:—**Drugs:** Higher: star-anise, cannabis indica, cascarrilla, certain grades of cardamoms, raw camphor, gentian, gum ammoniacum, glycerine, jalap, kamala, oils of bergamot, geranium, and mirbane, Tonquin beans, jaborandi leaves, beeswax, and calahar beans. Firm: Rhubarb, senna, vanilla, ipecacuanha, cascara sagrada, ergot of rye, and gum myrrh. Lower: Curaçao aloes, ordinary Zanzibar aloes, Tolu, cuhebs, fenugreek, gum benzoin (some lots sold without reserve), Tonquin musk (third pile), menthol, and sassafras oil. Opium is weak. In chemicals we quote higher: refined camphor, arsenic, sulphate of copper and caustic soda; and lower: citric acid, tartaric acid, cream of tartar, and quinine. Quicksilver is lower. In the drysaltery and outside markets the changes may be summed up as follows:—**Advanced:** Turmeric, Siam sticklac, quillaya, dyewood extracts, cotton oil, linseed oil, rape oil. Galls and gambier are steady. Benzol, ordinary olive oils, castor oil, turpentine, shellac, soda crystals, cloves, ginger, and pearl sago are easier to buy.

**ACIDS.**—Citric remains very neglected, and if any change at all, it is just a shade easier, 1s. 2 $\frac{3}{4}$ d. having been accepted for the week. Boracic very firm at prices last quoted. Oxalic: It is not so easy to find sellers, and 3d. per lb. is the lowest quotation (sal acetos, 4 $\frac{3}{4}$ d. to 4 $\frac{1}{2}$ d.). Tartaric: In foreign acid there has been a decline of  $\frac{1}{2}$ d. per lb., sales having been made first at 1s. 2d., and subsequently at 1s. 1 $\frac{3}{4}$ d., less usual discount, though for forward delivery 1s. 2 $\frac{1}{2}$ d. is still asked. English may now be had at 1s. 2 $\frac{1}{2}$ d. to 1s. 3d., according to brand, but Lawes' is still held above that figure by the makers.

**ALOES.**—Part of the recent arrivals of Cape aloes was offered to-day, the bulk of the 50 cases catalogued being owned by the first hand. Twenty-five of these sold at steady prices—25s. to 26s. for fair to good bright hard, and 23s. to 24s. for medium. The importers say that they have no knowledge of any further lots on the way. If it were not for the abundance of ordinary Curaçao aloes and other causes the value of the Cape variety would undoubtedly be very much higher than it is now. Of Curaçaos a fair quantity, mostly of ordinary quality, was again forced off at reduced values, a few packages of good brown livery in gonrds at 60s. to 65s., pieces at 32s. per cwt., common overheated at 5s. to 10s. per cwt. Good bright Cape without buyers, and bought in at 22s. per cwt. For 25 boxes so-called Barbadoes there were no bids at 25s. per cwt. Several lots of East Indian aloes sold, soft sour red Zanzibar in tins being knocked down very cheaply at 39s. to 41s. per cwt., while for fair hard red an offer of 75s. per cwt. was solicited without response.

**AMBERGRIS.**—Fine quality remains excessively scarce, and brings fancy prices. At auction several lots were offered, but none of them were of first-rate quality; 5 tins were bought in, fair-flavoured chips at 120s. nominally; ordinary black and specky, 55s. to 60s. said to be the price. A lot of about 23 oz. black gummy, weak flavoured, sold subject to approval at 35s. per oz.

**AMMONIA SALTS.**—Carbonate steady, but unchanged,

3 $\frac{1}{2}$ d. per lb. being the quotation for English; for quantities this might be shaded. *Sal ammoniac* remains in very good demand at 37s. for first and 35s. for second quality bright crystals. Sulphate steady, with very little change; Beckton terms, 11l. 16s. 3d.; 24-per-cent., London, 11l. 17s. 6d.; Hull and Leith also 11l. 17s. 6d.

**ANISE.**—We understand that, of the very small stock of Star-anise available in London, a few cases have been sold this week at no less than 115s. per cwt., which shows about 10s. advance again. At auction 10 bags ordinary small dusty Spanish were sold at 23s. 6d. per cwt.

**ARECA NUTS.**—A small consignment of fair quality was offered, and bought in at 25s. per cwt. nominally, 22s. being suggested as an acceptable figure.

**ARSENIC** is sold at higher prices, and the spot quotation is now 13s. 9d. for best white powder.

**BALSAMS.**—No *Copaiba* balsam was offered at auction to-day, but in the private market the quotations remain unaltered. The arrivals of this variety in New York remain moderate, but the importers' views are so high as to prevent business. The best varieties are still very scarce, and the market remains firm but somewhat slow, Angostura and Maranhão equal to 2s. 10d. c.i.f. London. Canada balsam steady at 1s. 4d. to 1s. 5 $\frac{1}{2}$ d. per lb. "c.i.f." for good bright thick. Three packages Peruvian balsam were bought in to-day at 4s. per lb.; for somewhat thick balsam (ullage) 2s. 9d. per lb. was accepted. The recent speculative tendency in America is said to have given way, and the market is now reported dull at the parity of 3s. 10d. c.i.f. London. Five cases Tolu were bought in at 1s. 4d. per lb. From America the news comes of an easier market and liberal arrivals in New York. The nearest quotation thence comes to 1s. 3d. per lb. c.i.f.

**BENZOL.**—The market has been slightly easier this week, and sales are reported at 4s. for 90 per cent. and 3s. 1d. for 50 per cent., but it is thought that the position of the article is quite as strong as ever, and that these sales only represent small quantities which have been sold by some operators for the purpose of depressing the market.

**BLEACHING-POWDER.**—Prices keep firm, and the demand continues. Tyne and Lancashire, 5l.; London, 6l. 15s.

**BORAX.**—There is no change in the quotations of the manufacturers; second-hand may be had at 28s. 6d.

**BUCHU.**—None were offered in auction to-day, but we hear of small sales privately; fair green round leaves at a parity of 3 $\frac{1}{4}$ d.

**CALABAR BEANS.**—The last sales reported from Liverpool were at the rate of 9 $\frac{3}{4}$ d. per lb.

**CALUMBA.**—The price for fine yellow washed is 50s. per cwt., but at the auctions there was no bid for a parcel offered at that figure. 125 bags fair, mostly grey, all sizes, but sound, sold at 10s. 6d. per cwt., rather cheaper.

**CAMPHOR (CRUDE).**—On the spot there is very little available, and fancy prices are asked—viz., 8l. 10s. per cwt. For forward delivery quotations are much higher, viz., 165s. "c.i.f." terms, delivered weights, at which sales have been made. A vessel with 1,900 tubs, however, is known to be on the way and shortly due, and she is known to be followed at short distance by two others, the aggregate of the three cargoes being 4,700 tubs. The consignment in the first vessel is said to be all sold already, while of the other two very little is said to be available, but whether the stuff is in the hands of manufacturers or dealers we cannot say. Mail reports from Hong Kong, dated January 14, state that there were about 100 piculs Japan, but no Formosa camphor, in stock on that date. Chinese holders were still sellers, but European owners stood out for higher prices. The tone of the market was somewhat less firm.

**CAMPHOR (REFINED).**—The English refiners have now advanced their quotations for *Bells* to 2s. per lb. Some of the foreign makers appear to be temporarily out of the market, but one of them quotes 1s. 10 $\frac{1}{2}$ d. net, or about equal to the English price. The price of the article has now reached a point at which it would seem exceedingly hazardous to forecast even the immediate future. From New York the news comes that the dealers and refiners there are very con-



fidient of still higher rates. The latter's price for blocks is equal to 2s. 3d. per oz., and they intend to put it up still further, as they say that they have extreme difficulty in getting supplies of the raw material, which they are purchasing in Europe so far as they are able, while the season for consumption is now gradually drawing nearer. We also hear that German firms are again purchasing camphor in England.

**CANNABIS INDICA.**—25 packages, fair to stalky, green tops, were bought in at 5½d., and another lot of 8 bags, also fairly good quality, sold at from 5d. to 5½d. per lb., which is an advance of about ¼d.

**CANTHARIDES.**—The market for *Russian* flies on the Continent is, generally, very flat, and our quotations here are without alteration. *Chinese* neglected.

**CARDAMOMS.**—Of 253 packages offered to-day, 201 were sold, with good competition, at rather irregular prices, the first lots offered being generally 1d. to 2d. cheaper; but gradually the market improved, and afterwards a slight advance was occasionally obtained. Some fine *Wild Ceylon* cardamoms sold at from 1d. to 2d. below the recent quotations. The following prices were obtained:—*Ceylon-Malabar*: medium round yellow, 1s. 8d. to 1s. 9d.; small ditto, 1s. 3d.; medium brown heavy, 1s. to 1s. 1d.; dull and small mixed round, 9½d. to 1s.; fair heavy round brown, 1s. to 1s. 2d.; common ditto, 10d. per lb. *Aleppy*: ordinary browns, 1s., a good price. *Mysore*: fine medium to bold pale soft and heavy, 2s. 10d. to 3s.; smaller ditto, 1s. 9d.; ditto, but long shaped and smaller size, 1s. 4d.; yellow, heavy good shaped, partly long yellow, 1s. 7d.; smaller size, 1s. 4d.; medium pale, but rather dull, 1s. 7d.; split and brown, mixed medium to bold, 1s.; fair small round, 1s. 1d. to 1s. 3d.; long medium pale, 1s. 6d.; medium yellow round, 2s. 1d., which was several pence above valuation; small grey, 1s. to 1s. 1d. *Wild Ceylon*: bold full pods, 1s. 11d. to 1s. 9d.; common lean ditto, 8d. to 11d. per lb.

**CASCARA SAGRADA.**—From New York a better inquiry is reported, and export orders, which have been wanting for a long time, are coming forward. Sales of good thin bark for Germany are reported at 60s., c.i.f. terms, but in other quarters the quotation runs from 62s. 6d. to 65s. per cwt.

**CASCARILLA.**—A parcel of 30 bales just imported *viâ* New York sold, with good competition, at an advance of 2s. from the latest quotations: good silvery at 36s.; fair sound at 30s. to 30s. 6d.; ordinary damaged at 27s. to 28s.

**CASSIA FISTULA.**—120 bags from Ceylon, fairly stout dry pods, were bought in at 12s. per cwt.

**CHAMOMILES.**—The market remains very quiet, and we do not hear of any transactions privately. About 20 bales shown at the auctions to-day, fair yellow, were bought in at prices ranging from 65s. to 79s. per cwt. nominally.

**CHIBETTA.**—For a parcel of 19 bales in bundles, of good appearance, 3½d. to 4d. per lb. is asked.

**CINCHONA.**—To-day's auctions offered little or nothing of any interest. About 150 packages of flat South American *Calisaya*, mostly sea-damaged, and nearly all weak and thin, were mostly bought in, a few lots selling at 1s. 1d. to 1s. 2d. for fair, 1s. 4d. for medium, and 10½d. down to 8½d. per lb. for common discoloured. A single package of 94 lbs. so-called *Maracaibo* bark, imported *viâ* New York, and showing very heavy bold pieces of an almost unnatural red tinge, was bought in at 1s. per lb., but nobody would have it at a penny. The receipts of cinchona in Colombo by the Ceylon Government Railway for the year 1889 were 2,715 tons, compared with 4,422 tons in 1888, a falling off of 1,707 tons. The shipments of bark from Ceylon during the last two seasons have been as follows:—

	1889.	1888.
October .....	lbs. 758,835	1,440,797
November .....	845,356	891,217
December .....	677,448	1,164,333

For the auctions to be held here on Tuesday next 2,937 packages are already declared. They consist of 1,146 Ceylon, 1,375 East Indian, 130 Java, and 316 South American *Calisaya* bark. Our imports from all quarters since the last report have been 2,120 packages. The bark

shipments from Java during the first half of the season (July 1 to December 31) have been as follows:—

	1839	1833	1837	1826	1835
Govt. Plantations, Amst. lbs.	292,915	335,433	381,477	359,591	270,579
Private plantations ..	2,321,745	1,851,838	1,635,729	282,105	429,879
Total .. ..	2,614,660	2,191,321	2,017,206	641,696	700,458

**COCA LEAVES.**—The quotations remain unchanged since our last report. A parcel of 384 lbs. very good green, but partly broken, leaves from Ceylon (Kelvin estate) has arrived quite recently; an offer of 1s. 6d. per lb. was made, but the owner bought it in at 2s. per lb. Rather large arrivals are reported to have taken place in New York, and the market rules dull and somewhat easier in consequence.

**COLOCYNTH.**—There appears to be rather more demand for this drug; a parcel of 22 packages *Turkey* apples, fair, partly seedy, is held at 1s. 4d. per lb. Another lot of more ordinary, partly pale, partly dark and seedy, sold at 1s. 2d. per lb.; low at 10½d. per lb.

**CONDURANGO.**—Fourteen bales woody and damaged bark from Guayaquil were shown, and some lots were disposed of at 6d. per lb.

**COPPER (SULPHATE)** has again advanced; good brands, 93 per cent., on the spot, are now scarcely obtainable at 26l. 10s., or even 27l.; March delivery, 25l. 10s. to 26l.; May, 24l. For delivery in the latter part of the year the article may be had at easier rates, say 22l. July-September, but purchasers do not care for closing on these terms, as it is no secret that the existing facilities for output, both here and abroad, are being increased, and new makers will soon be offering also.

**CREAM OF TARTAR.**—Still declining. Sales of white crystals are reported at 99s. 6d., and that price to 100s. is the general quotation.

**CROTON SEED.**—The trade are unwilling to pay the prices for which this article is held. At the auctions an offer of 19s. per cwt. was refused for good bright *Ceylon* seed, while one of 13s. 6d. per cwt. for partly dark seed was also declined.

**CUBEBS.**—Several parcels, amounting altogether to 39 bags, were shown at to-day's auctions, but there is not much demand at the very high rates which are still being asked: fair stalky and dusty mixed at 22l.; for small, very shrivelled berries an offer of 23l. was refused, and a bid of 20l. was also declined for another lot fair, slightly doubtful, mixed and dusty. The article seems to be slowly coming down from the very high quotations. The shipments of cubebs from Java during the first half of the season (July 1 to December 31) have been: in 1839, 379 piculs; in 1888, 148 piculs.

**CUMIN SEED.**—Several lots of Malta seed were offered to-day. Some of the holders stand out for 26s. per cwt., but others made sales at 22s. to 23s. for grey to brown good-flavoured.

**CUSCUS ROOT.**—Three bales good ordinary sold, without reserve, at 19s.

**CUTTLE FISH.**—In good demand to-day, and several sales were effected. 24 cases from Bombay, very broken but dull, sold at 5½d.; bolder but rather brown, 5d. to 5½d.; 8 casks Mogadore, bold, dry pale, at 4½d. to 5d. per lb. For a lot of 20 barrels from the Cape, medium size, damp, 4d. is named as the price.

**DRAGON'S BLOOD.**—6 cases common bricky lump of very poor colour were sold partly at 40s., which was very cheap, but rising up to 52s. 6d. Another lot of 10 cases finger in reed, ordinary to fine fiery colour, were bought in at 5l. 10s. to 7l. 10s. per cwt.

**DYEWOOD EXTRACTS.**—From New York a strong Continental demand for logwood extract is reported, and it is said that the American makers are declaring their inability to go on filling orders at the current prices of 41s. to 43s. per cwt., according to quality.

**ELATERIUM.**—2s. 6s. per oz. is still quoted as the price.

**ERGOT OF RYE.**—It is said that there has been more inquiry lately, especially for America, but we can certainly



not report any improvement in prices. Between the quotations for Russian and Spanish seed there is now but a very slight margin left. For fair *Spanish* 1s. 3d. per lb. was refused to-day, but a rather pale lot sold at 1s. 2d. per lb. *Russian* is quoted at 1s. 3d. per lb., but that price could perhaps be shaded. In Hamburg some parcels of Russian ergot have arrived, and found prompt buyers at steady rates for satisfactory quality.

**FENNEL SEED.**—Nineteen bags of 150 lbs. each sold at 13s. 6d. per cwt. to-day.

**FENUGREEK SEED.**—Prices seem to be somewhat lower; fair to fairly clean *Mogadore* is offering at from 6s. 6d. to 7s. 6d. per cwt.

**GALANGAL.**—Fifteen bags of this article, which has long been very much neglected, were sold to-day at 11s. 6d.

**GALLS.**—In China, according to the mail advices, dated January 14, the market remains firm, but a large business had taken place in consequence of the reduction in freight rates. The statements that the new crop is of very poor quality are confirmed. Cablegrams received this week from Shanghai quote usual shape 63s. c.i.f., and plums 62s. 6d. c.i.f. terms. On the spot here 75s. was paid yesterday. In *Turkey* galls there has been rather more inquiry for blues, at 59s. to 60s. per cwt. At to-day's auctions several parcels were shown, but no sales were effected worth recording.

**GAMBIER.**—*Block* remains steady, with small sales at 27s. 3d. to 27s. 6d. on the spot, owing to the recent reduction. Liverpool reported steady.

**GAMBOGE.**—Good picked pipe would now be obtainable at 13l. per cwt. A few cases not selected sold cheaply, fair dry broken pipe at 11l. 5s., dull broken ditto at 10l., and one case of dark pale pieces, somewhat damp, at 9l. 7s. 6d.

**GENTIAN ROOT.**—Good bright quality is now held at 17s.

**GLYCERINE.**—The German distillers have had a meeting, and agreed not to sell double distilled, s.g. 1.260, below 67l. 10s. per ton, at which price, even, they say that they have scarcely a margin left; some of them, in fact, quote slightly more. But second-hand holders are still offering slightly below these quotations. Crude glycerines are undoubtedly proportionately very dear, and the market is rising. Some distilled glycerine is now being shipped to Europe from Australia, and seems to find a ready sale here.

**GUARANA.**—A bid of 6s. per lb. would still be accepted.

**GUINEA GRAINS.**—Prices remain very high owing to the scarcity of the article; 6 bags of good bright clean grains were offered to-day and 42s. was suggested, but no bids were made.

**GUM AMMONIACUM.**—There have been some arrivals lately, which were put upon the market to-day, and, with eager competition almost all were sold at even much dearer rates than were paid for the last few lots. The article still continues to be scarce and sought after. Good loose yellow clean drop brought 57s. per cwt.; fair seedy siftings and pickings, 17s.; good small pale siftings, 27s.; and small and dark mixed grain, 16s. per cwt.

**GUM ARABIC.**—The parcels sold to-day include two barrels pale picked, partly dusty, *Turkey* at 11l. 15s.; small pale grain only one cask very fine white picked for druggists, at 12l. 2s. 6d.; ordinary siftings, without reserve, at 32s. The price for fair *Mogadore* sorts, brown and drossy mixed, was named at 7l., and of fine white selected at 10l. 10s. Good glassy amber *Aden* drop bought in at 77s. 6d. per cwt.

**GUM BENZOIN.**—*Sumatra* in good demand, and of 70 cases offered 52 were sold partly without reserve, and in that case at some decline, but the other lots, with good competition, brought full prices. Fine bold white almondy, red borders, very fine vanilla flavour, bought in at 10l.; fine seconds, good flavour almondy, also red borders, sold at full prices, for 9l. 7s. 6d. falling to 9l.; medium to bold almondy good seconds, 8l. 10s. to 8l. 12s. 6d.; and a well-packed lot of ditto at 8l. 5s. to 8l. 7s. 6d.; fair almondy seconds, partly false-packed corners, from 7l. 5s. to 7l. 12s. 6d. *Siam* gum was not offered. Of *Palembang* gum, common red resin was bought in at 40s. nominally; for another lot of fair quality

containing some gum 24s. was refused; ordinary third *Penang* sold cheaply, without reserve, at 45s. to 46s.

**GUM ELEMI** remains excessively scarce and dear. For 5 cases good but rather dirty yellow very hard gum an offer of 46s. was refused, and 7 cases black West Indian block were sold at 6s. per cwt.

**GUM KINO.**—The market remains very dull for this article; five cases of good quality were bought in at 35s. per cwt. nominally.

**GUM MASTIC.**—Two cases ordinary yellow *Persian* were again offered, and 3d. would now be gladly accepted.

**GUM MYRRH.**—The demand has somewhat improved, and several lots were sold to-day. For fair pale *Aden* picked 6l. is asked; slightly blocky but fair pale sold at 5l.; and dusty sorts, without reserve, at 7s.

**HONEY.**—The demand for *Chilian* is exceedingly active, and fine hard white is selling at 45s. per cwt.; fair ditto at 42s.; and yellow at 35s. per cwt. From America an excellent demand for *Californian* honey is reported, especially as regards the better grades. The available stock of fine white candied honey in New York has fallen very low, and 47s. 6d. per cwt. "c.i.f." terms was the last quotation. Amber grades offer at 39s. 6d. to 41s. 6d., and pale amber at 45s. to 43s. 6d. per cwt. "c.i.f."

**INSECT FLOWERS.**—The market is steady, but there is no alteration in prices. We have received a sample of insect powder made from flowers grown in Australia (Victoria) by a chemist who has been turning his attention to the cultivation of medicinal plants. He obtained the seed from Dalmatia, and has now several acres under cultivation, the flower-heads being gathered by a stripping machine invented by himself. The grower had great difficulty in obtaining suitable seed, but he appears at last to have got hold of the right variety, for the sample sent to us is of excellent quality. The pyrethrum harvest in Australia takes place between November and January, the cost of labour being greatly reduced by the use of the stripping-machine. Whether the powder or flowers could ever compete in Europe with the Dalmatian article is doubtful, but there is a large field for the new industry to cover in Australia.

**IODINE.**—There is no change whatever in the position of this article or its derivatives, but we understand that, so far as the nitrate is concerned, the negotiators for a renewal of the conventions are meeting with unusual and unexpected difficulties.

**IPECACUANHA.**—The long-expected arrivals have taken place this week, three consignments, aggregating about 10 tons in weight, having been entered from South America direct, and *via* Antwerp. At to-day's auctions 70 packages South American root were offered, of which 58 sold with very brisk competition. The first two or three packages went cheaply, buyers being evidently somewhat frightened by the heavy arrivals, but they mustered courage almost immediately, and holders would have had no difficulty in disposing of the whole parcel. The highest prices of the last auctions were fully maintained, and, though we cannot call the article quotably dearer, the market is certainly disposed to greater firmness. The following prices were paid:—Sound root, thin and wiry to fair, 7s. 3d. to 7s. 6d.; good stout fleshy and bright, 7s. 8d. to 7s. 9d.; first-class damaged, 7s. 5d. to 7s. 7d.; second class, 7s. 4d. to 7s. 7d. (a fine lot, 7s. 8d.) per lb. Five cases of the spurious East Indian root, which at one time was sold as ipecacuanha, but proved to be completely worthless, were again offered. They found no buyers.

**JABORANDI LEAVES.**—The advance in America, of which we made mention recently, has since progressed further. The demand remains strong, and there is very little to be had. Good Ceara leaves come to 11d. per lb. "c.i.f." terms.

**JALAP.**—Early in the month the first shipment of 24 bales of new-crop jalap arrived in New York, and caused some temporary easing off in the market, but since then the tendency has become much firmer again. Fifteen packages were offered to-day, partly of 1887 import, good heavy resinous root, for which 9d. was refused, though 10d. would probably have bought; 5 bales, of which no sample was shown, sold at 9d. per lb.



**KAMALA** has been rather scarce lately; 4 packages offered to-day sold at an advance of fully 2*d.* per lb., viz., 10*d.* to 10½*d.*

**KOUSSO**.—Good quality in bundles is not obtainable, nor do we know of any on the Continental markets; one bale of dusty and all broken herb sold to-day at 4*d.* per lb.

**MATICO**.—There have been some arrivals this week, which may probably be put up at the next auctions. To-day only 15 bales of very common quality were shown, and bought in, dusty and stalky at 2*d.*, black damaged, mixed with pale stalks, found no buyers at 1*d.* per lb.

**MERCURIALS**.—Prices are still nominally unchanged, but in view of the weak position of quicksilver a reduction does not seem unlikely.

**MORPHIA**.—Steady, but without change.

**MUSK**.—The market is excessively quiet, and no sales were made at to-day's auctions which show any change in value. First pile *Tonquin* pods, small to bold blue skin, fair shape, well trimmed, were bought in at 90*s.* per oz., but there were no bids at 87*s.*; old-fashioned pods, dry well-trimmed and fair yellow, bought in without mention of price; third pile pods, small to medium thin blue skin, rather ragged, sold very cheaply at 55*s.* per oz. Of *Thibet* musk one tin white hairy and skinny pods bought in at 40*s.* nominally. *Nepaul* grain musk sold at 35*s.* *Musk skins* limited at 7*s.* 9*d.* per oz.; trimmings brought 1*s.* 3*d.*

**OIL (CASTOR)**.—The London quotation for good *Calcutta* seconds is nominally 4*d.*, and that of first 4½*d.* per lb.; but at to-day's auctions 60 cases <sup>PB</sup><sub>I</sub> fine pale *Calcutta* oil (in badly-rusted tins) were sold without reserve at a considerable reduction, viz. 3½*d.*, rising to 3¾*d.* per lb. Nine cases fine pale *Italian* were bought in at 5½*d.* per lb. nominally. The Liverpool market is slightly easier, *Calcutta* seconds having sold there at a reduction of ½*d.*, viz. 3½*d.* per lb., and first pressure *French* at the same figure.

**OIL MIRBANE**.—Advancing in sympathy with the increasing prices for benzol, and 8½*d.* is now quoted.

**OILS (ESSENTIAL)**.—Among the Italian oils *Bergamot* remains very firm with an inclination towards a further advance. The price ranges from 9*s.* 10*d.* to 10*s.* 9*d.* per lb. f.o.b., according to quality. *Lemon* is also firm, but the range of prices for this oil is so wide that it would be misleading to give the quotations. Turkish *Geranium* oil is also exceedingly scarce, and hardening at 6*s.* 6*d.* to 6*s.* 9*d.* per lb. for good quality. For a parcel of 35 10-lb. tins of *Eucalyptus* oil an offer of 1*s.* 9*d.* per lb. was made to-day. The shipments of *Citronella* oil from Ceylon are larger than ever, but prices are very low indeed at present; for distant arrival they are 44*s.* per case "c.i.f." terms, and on the spot 125 cases (of 36 bottles) oil of good appearance, one lot sold at ¾*d.* per lb., but not less than that would be accepted. *Cassia* oil dull of sale; 3*s.* 7*d.* per lb. would be taken for good quality "unworked." Seven tins *Menthol*, good pale fairly dry crystals sold very cheaply to-day at 7*s.* per lb. *Lemongrass* quoted at 1¾*d.* to 1½*d.* per oz. The American market for *Peppermint* oil is quiet, and the quotation comes to 10*s.* 3*d.* to 10*s.* 6*d.* c.i.f. for H.G.H., and 10*s.* 6*d.* c.i.f. for March shipment. Japan *peppermint* was bought in at to-day's sale at 5*s.* per lb. *Sassafras* oil lower, owing to more pressing offers from the States, at 1*s.* 8½*d.* to 1*s.* 10*d.* per lb. "c.i.f." for the new crop. *Spearmint* oil also lower at 7*s.* c.i.f. for ordinary brands, and 9*s.* c.i.f. for H.G.H.

**OILS (VARIOUS)**.—*Cocoonut* oil remains very quiet and excites little attention. Ceylon is selling in retail quantities at 23*s.* 6*d.* for pipes; Cochin, 26*s.*; Mauritius hogsheads, 24*s.* to 24*s.* 6*d.* *Cotton-seed* oil has advanced to 20*s.* for crude, and 22*s.* 3*d.* to 22*s.* 6*d.* for refined; Hull also dearer; raw, 18*s.* 3*d.* to 18*s.* 4½*d.* *Lard* oil steady at 33*s.* for English; 36*s.* 6*d.* for American. *Linseed* oil in very good demand with an advanced market from 22*s.* 3*d.* to 22*s.* 6*d.*; the Hull market is also better, spot, 21*s.* 9*d.*; and from Liverpool there are also reports of a very good demand. *Petroleum* quiet and somewhat neglected, the nominal quotation being 5¼*d.* to 5½*d.* for American, and 5½*d.* to 5¾*d.* for Russian. *Rape* oil dearer in consequence of the deficiency discovered in the stocks in France. On the spot

brown is quiet at 33*s.*; for English refined, 34*s.* to 35*s.* 6*d.* is asked; and Stettin refined is very scarce at full prices. *Palm* oil firm, but without change; there is only a little offering on the spot. *Sperm* oil: Crude firmly held, and only a little obtainable at 46*s.* *Turpentine* easier and depressed; American spirits, 31*s.* 9*d.* on the spot.

**OIL (OLIVE)**.—There have been large arrivals of *Mogadore* oil, and in consequence the price has given way slightly, and to arrive 37*l.* 10*s.* would buy. *Spanish* oil is also rather lower. Fine *Eating* oils, however, remain firm, but unchanged. In Italy and the Levant the markets are very firm, although the Gioja crop promises very well, and is progressing favourably.

**OPIMUM**.—The London market has become very weak, and there is an almost complete absence of business, fine druggists' nominally, 14*s.*; second ditto, 12*s.* per lb. *Persian* also nominal at 13*s.* 9*d.* Telegrams from Smyrna describe the market there as firm at the last prices, but the heavy rains which have occurred in the growing districts, though they are now said to have stopped, have evidently had their effect upon the market.

**ORANGE PEEL**.—Neglected at 7*d.* to 8*d.* for fair brown gelatine, fine bright thin mouldy sold to-day at 11*d.* to 1*s.* per lb.

**ORRIS ROOT**.—Prices for the best Florentine are still very high. At auction to-day 4 bags ordinary very dark sold without reserve comparatively cheaply at 30*s.*

**POTASH SALTS**.—Best Montreal *Potashes* firm at 22*s.* *Pearlshashes* without inquiry; 30*s.* 9*d.* per cwt. nearest price. *Bichromate* firm at 4*d.* per lb. *Chlorate*: A good business is reported at a quotation of 4¾*d.* per lb., and that is now the very lowest price. *Prussiate*: Prices are more or less nominal, and we do not hear of much business; quotations run from 9½*d.* to 10½*d.*, according to brand.

**PUREE**.—A small lot was sold to-day at the high price of 6*s.* 6*d.* per lb.

**QUICKSILVER**.—The importers' price is now practically nominal at 9*l.* 15*s.*; second-hand holders have been decidedly easier, and are reported to have sold at 8*l.* 19*s.* 6*d.* to-day, and at 9*l.* yesterday. There has been a large arrival this week, viz., 5,002 bottles from Spain, in addition to which we have received 150 bottles from Italy.

**QUILLAYA**.—The price for the bark has advanced to 18*s.* London terms. The article is now being put on the market in a new form, namely, rasped, and also as a liquid extract made in South America.

**QUININE**.—At the end of last week the market became a good deal quieter, with more pressure to sell, and transactions were reported to the extent of about 10,000 oz.; *German* and second-hand *B & S* and *Brunswick* at 1*s.* 2½*d.* spot, and 1*s.* 2½*d.* for March. Since then we have not heard of any business. There are buyers at 1*s.* 2½*d.*, but no sellers so far as we can find out. The bark sold at last Tuesday's auctions in London to the manufacturers is estimated to represent an equivalent of 166,000 oz. sulphate of quinine, or about 2¾ per cent. on the average. At the drug sales 1,000 oz. *Italian* in bulk sold at 1*s.* 2¼*d.* per oz.

**RHUBARB**.—About 100 cases were offered at to-day's auctions, nearly half of which was sold at very steady prices: *Shensi* round ¾ fair pinky grey fracture, good yellow coat medium to bold 2*s.* 2*d.*, smaller ditto, 1*s.* 9*d.* to 1*s.* 10*d.*, flat ¾ fine bright, ¼ brown fracture, bold root, fair yellow coat 1*s.* 9*d.* per lb., the smaller size 1*s.* 6*d.* per lb., small to medium good coat and fracture 1*s.* 6*d.* to 1*s.* 8*d.*, druggists' root small round good pinky fracture 2*s.* 2*d.* refused and bought in at 3*s.* per lb., very good round pickings sold at 1*s.*, flat ditto at 11*d.* per lb., very wormy round small to medium fair fracture 10½*d.* *Canton*, medium to bold root, very loose texture, round and wormy now at 8½*d.*; *High dried* small to medium flat, slightly wormy 10*d.* per lb. refused, 11*d.* being the price.

**SANDAL WOOD** firm and rising. The price named for East Indian logs to-day was 65*l.* per ton.

**SARSAPARILLA**.—A fair quantity of very rough *Grey Jamaica* root sold at 1*s.* 4*d.* for sound, and 1*s.* 3*d.* per lb. for damagcs. From New York a stronger demand for



*Mexican* root, followed by active speculative buying, is reported, and the stock now left on the market is moderate, 3½d. to 4d. per lb. "c.i.f." being quoted for Vera Cruz. *Honduras* root remains quiet.

SCAMMONY ROOT remains exceedingly scarce, and small sales have lately been made at 50s. per cwt.

SENNA.—The 576 bales of *Tinnevely* leaves offered to-day were nearly all of very inferior quality, but with the exception of about 30 packages, the whole was sold at very full, though not notably dearer rates, common dark and specky yellowish small to medium leaves, 1d. to 1½d.; half rotten, ½d. per lb.; ordinary yellow to green, 2d. to 2½d.; a few fair to good green leaves, 3½d. to 5½d. per lb.

SHELLAC.—Generally dull and lower. Only a very small business was reported before the auctions, which included:—

	Cases	Cases
Orange lac .. ..	804 of which	231 were sold
Button " " .. ..	155 " "	80 " "
	959	311

The sales passed off with very little animation, holders' ideas being in some cases above the market prices, while others gave way and accepted a reduction of from 1s. to 2s. on *Orange*, and from 2s. to 3s. on *Button lac*. The sales include, of *Orange lac*, good bright, rather crinkley, worked, 85s.; ordinary livery, 75s.; unworked good strong to pale, slightly cakey, 92s.; ordinary dark red, 69s. to 70s. *Button lac*, fair dark mixed seconds, 86s. to 87s.; ordinary to good thirds, 76s. to 86s.; and dark black fourths, 66s. Since the auctions the market has been stagnant, both on the spot and for future. The market closes firmer to-day, with sales of TN *Orange* for June delivery at 74s. per cwt. The following were the prices at the call:—

	Feb.	Mar.	Apr.	May	June
Orange TN, sellers .. ..	73/	73/	73/3	74/	74/
" buyers .. ..	70/3	72/	72 6	72/6	73/6
Garnet AO, sellers .. ..	72/6	72/	71/	—	—
" buyers .. ..	70/	70/	70/	—	—

STICKLAC.—*Siam lac* is reported dearer, with sales of good, free from wood, at 42s. 6d. per cwt.

SODA SALTS.—*Bicarbonate* in demand, and very firmly held at 6l. 5s., ex warehouse. *Ash* very scarce on the spot, while not much is offering for forward delivery. The Tyne quotation remains at 1½d., less 5 per cent.; London, 1½d., perhaps 1½d. The manufacturers of *Caustic soda* remain very firm in their demands, and are confident that they shall be able to obtain higher prices presently, but a rather large quantity has passed into the second-hand, and this somewhat depresses the market; white, 60 to 70 per cent., spot, 9l. to 9l. 2s. 6d.; cream, 8l. 5s. *Crystals* rather easier; London, 56s. 6d. ex ship, or 60s. landed; Tyne, 48s. to 49s. *Nitrate* somewhat firmer, 8l. 7s. 6d. to 8l. 17s. 6d., according to test.

SNAKE ROOT.—Two bales sold to-day at 1s. 3d. per lb.

SPICES.—*Chillies*: The bulk of parcels at auction were bought in at nominal prices, except a few dark-coloured of old import, for which only 25s. 6d. was obtainable. *Cassia lignea* dull at 22s. 6d. nominally; 468 packages broken *Cassia* were all bought in. Cablegrams from Hong Kong quote cassia at 23s. "c.i.f." and broken ditto 15s. "c.i.f." with a large business. *Cinnamon*: The next quarterly auctions will take place on February 24. Of *Cinnamon chips*, 400 bags ordinary, recently imported, brought 2½d. per lb., which is a firm price. *Cloves* depressed, and lower for forward delivery. Several sales are reported January to April delivery at slightly below the prices given in our last report. On the spot about 230 bales sold at auction at a decline of ½d.; dark to good, 4¾d. to 4¾d.; ordinary to medium Amboyna also cheaper, at 5¾d. to 6½d. Two packages of exceptionally fine pale Penang cloves sold at the fancy price of 2s. 5d. to 2s. 6d. per lb. *Ginger*: Cochin, new crop slow of sale, and somewhat lower; small to bold bright, partly cut, 23s. to 39s. Jamaica also cheaper; common Rhatoon, medium washed to good old, 82s. to 96s. per cwt. *Mace* steady; fair to fine bold pale Penang, 2s. 4d. to 3s. 2d. per lb.; ordinary to good West Indian, 2s. 3d. to 2s. 9d. *Nutmegs*: 72 packages West India, of new import, mostly well shaped and bright coloured, sold at steady prices.

SQUILLS.—Of 27 bags a few lots, fair dry quality, sold at 1½d. per lb.

ST. IGNATIUS BEANS are reported very scarce. Three bags (about 5 cwt.) were bought in at 8d. per lb., but we believe that 7d. per lb. would mean business.

STROPHANTHUS.—Two bags small green seed from the Cape are offering at 10s. per lb.

TEA.—*China* market: The Congou department shows a firmer tone this week for teas a grade above common, and, partly as a result of lighter sales, there has been some reaction from the abnormally low prices at which really good teas were being sacrificed. The quotation of leaf tea for price is still 4d., but teas that last week were fetching 4½d. to 5d. are this week fetching 4¾d. to 5¼d. or 5½d., and are being taken by the wholesale dealers eagerly enough. Everything under 8d. (and this is almost the whole of the Congou offering) shows firmness; but finer grades are neglected, and Panyongs at 9d. to 9½d. are very cheap still. A really choice Kintuck, for which 1s. 3½d. had been refused, was knocked down on Tuesday at 9½d. Newmakes steady; Souchongs unaltered. Scented Capers are being sold at very low prices, several really fine teas in liquor going from 7d. to 9d. on Tuesday, but there is nothing left that can be called really choicest. *Assams* unaltered for lower grades, common ordinary broken tea fetching 6¾d., and fair common leaf 7d. to 7¼d. Pekoes, 8d. to 8½d., show rather easier rates, but all really good liquoring teas are now being eagerly sought after. Broken Pekoes remain cheap, and are selling somewhat irregularly. Lower grades of *Ceylon* are ½d. to ¾d. easier for the week, a common leaf tea selling as low as 8d., and good useful tea 9d. to 9½d.; while really choice quality teas may be picked up from 10d. to 11d.

TONQUIN BEANS.—Two cases fair *Pará* were bought in to-day at 4s. 6d. per lb., an offer of 2s. 6d. being rejected. In New York *Angostura* beans are still attracting a great deal of attention, and remain an article of active speculation there. The available supplies of this variety are now all in second hands, and most of the holders are not willing to part below 7s. to 7s. 6d. per lb. A few days ago, however, there were still some lots in the market at 6s. to 6s. 6d. per lb., according to quality. *Pará* beans are practically out of stock, though a few odd packages might still be found at about 5s. per lb. c.i.f. terms.

TURMERIC continues in good demand at rather dearer prices, with sales of good bright Madras finger at 12s. 6d. per cwt.

VANILLA.—About 200 tins were offered to-day and sold at very full prices, with an occasional advance. Fair slightly crystallised, 4½ to 7 inch, 13s. 6d. to 15s. 6d.; fair, 7 to 8 inch, 16s. to 16s. 6d.; good, 7½ to 8½ inch, 18s. to 21s.; 8 to 9 inch, 22s. 6d.; rather brown, 5½ to 8 inch, 13s. to 13s. 6d.; ordinary brown, 5½ to 8 inch, 7s. 6d. to 12s.; common foxy, 4s. 3d. to 6s. 6d. per lb.

WAX (BEE'S).—Prices are much dearer all round, *Jamaica* selling at 6l. to 6l. 2s. 6d. for good clean yellow; *Mogadore*, fair orange at 5l. 5s. to 5l. 7s. 6d., ordinary dark to fair grey mixed *Australian* 5l. 5s. to 5l. 12s. 6d., and for 100 packages, *Madagascar*, good bright yellow, 93s. to 96s., chocolate to brown, 91s. to 87s. per cwt.

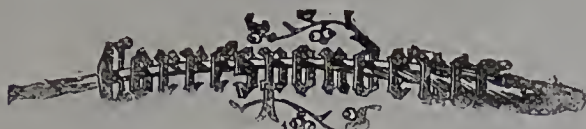
#### THE AMSTERDAM CINCHONA AUCTIONS.

(Telegram from our Correspondent.)

AMSTERDAM, February 20.

AT to-day's auctions 2,062 packages bark, or nearly the whole of the supply offered, were sold. At the opening the unit was 10c. per ½ kilo. (= 1½d. per lb.), but, with good competition, gradually rose to 11c. (= 2d. per lb.), at which the bulk of the bark was disposed of. The prices paid range from 6c. to 93c. (= 1d. to 1s. 4½d. per lb.) for manufacturers' bark in quills, broken quills, and chips; 27c. to 66c. (= 5d. to 1s. per lb.) for root; 13c. to 94c. (= 2¼d. to 1s. 4¾d.) for druggists' bark in quills, broken quills, and chips; and 13c. to 22c. (= 2¼d. to 4d.) for ditto root. The principal buyers in order of precedence were the Auerbach factory, the Brunswick factory, and the Amsterdam quinine works.





### Memoranda for Correspondents.

*Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.*

*Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers, please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

*Before writing for formulæ consult the last volume, if you have it.*

*Letters, queries, &c. will be attended to in the order received.*

### The Pharmacy Acts Amendment Bill.

SIR,—I have always felt that the proper place for a member of any council to express his views is at the meetings of that council, and I have hitherto strictly observed that rule, although at times sorely tempted to write to the trade journals. The occasion now warrants this exception, and with your permission I would call the serious attention of the "trade," both in London and the provinces, to the provisions of the proposed Pharmacy Bill. Clause 6 is a direct encouragement to large pharmacies and co-operative concerns. They have at all times in their employ assistants qualified by examination, whereas chemists in a smaller way have to rely on well-trained apprentices and young men who may have completed their apprenticeship, and are qualified by experience, though not by examination.

If this Bill is passed, I venture to say that the law will be transgressed by hundreds, if not by thousands, of honest and conscientious chemists throughout the country.

The question is frequently asked, "What has the Pharmaceutical Society done for us?" and the usual reply is, "Nothing." This is wrong. It now proposes to bring in a Bill which will make the majority of the chemists in the country law-breakers. It proposes to extend the limit of chemists and druggists who may take their seats on the Pharmaceutical Council from seven to ten. How absurd! Why not throw the Council open to the best men, whether members or associates, and whether in business on their own account or not? What is there to fear? Have not associates the interests of the trade quite as much at heart as members? This Bill does not even secure for chemists and druggists exemption from the jury list. Any measure to be of any use, to command the sympathies and support of the "trade," must be a comprehensive one. It must, in addition to imposing restrictions, some of which are at times very irksome, also seek to secure concessions in the shape of safeguarding the interests of those on whom these restrictions are placed.

We are told that it is useless introducing any clauses into the Bill which would cause opposition. My idea is that a Bill that can be passed unopposed through Parliament would be of such a colourless character as not to justify the Council in wasting time and money on it. I consider it to be my plain duty to oppose to the best of my ability the passing of the Bill in its present form, and shall be glad to hear from those who think with me in this matter. I believe meetings of chemists should be held in every city and every town throughout the kingdom. Deputations should be appointed to explain their views to the local members of Parliament, and a few men should be selected to organise a determined opposition to this Bill in Parliament itself.

I regret exceedingly that I have to place myself in opposition to the President (with whose ability and determination I am greatly impressed) and the great majority of the Council. I believe they are as honourable and conscientious in their views and in the course they take as I claim to be myself. Notwithstanding this, I have frequently differed in opinion with the majority in the Council. I have always held that, since the Pharmaceutical Society is a democratic body, we should frequently change our president. When questions of spending large sums of

money on extensions of the buildings at Bloomsbury Square, and the establishment of a "Research Laboratory," &c., have been discussed, I have invariably found myself in the minority. I have from time to time objected to the almost paternal watchfulness exercised over the different members of the Council. There always seems to be a fear that someone or other will blunder and say something which at some future period he will regret having said; the result is that "We are in committee, gentlemen," *volens volens*, before we know it. I always feel that each member of the Council is a being responsible for his actions and sayings, and if he chooses to act or say anything foolish or unworthy of that Council, the sooner he is shown up through the press the better for the Council, the trade, and himself.

I write freely and without reserve, as it is not my intention to contest a seat at the next election:

Yours, &c.,

Llanelly, February 19.

GWILYM EVANS.

Mr. Thomas Reade (Wolverhampton) sends us a copy of a letter which he has addressed to the President of the Pharmaceutical Society, pointing out what he regards as the important omission in the Pharmacy Bill of a provision for exempting all chemists and druggists from serving on juries. He urges that this exemption should be asked for "on the broad ground that the safety of the public demands it in the case of the whole body of registered chemists, equally as in that of pharmaceutical chemists." Much of the dispensing, and by far the larger part of the sale of drugs in the country, is conducted by men having the Minor qualification only, and the privilege, he argues, should not be, as it is now, a reward for passing the Major.

Glasgow (245/30) protests against the provision in Clause 6 making it unlawful for any person not holding a qualification to compound medical prescriptions. If the Bill pass in this form, the consequences will be disastrous to all but the larger establishments. A great mistake, he holds, was made in not accepting Mr. Schacht's amendment to add the words "or is acting under the direct employment of a pharmaceutical chemist or chemist and druggist." "Glasgow" asks that at least the Bill shall apply to England only. On this matter the Council, he says, does not represent Scotland; he claims to have pretty good means of knowing that not 10 per cent. of the chemists in Scotland are with them. He further remarks that chemists in the West of Scotland want no further legislation unless shops belonging to medical men are put on an equal footing with those of the chemist. In Glasgow three-fourths of the "open shops" belong to medical men, and he asks where is the justice of handicapping the one-fourth and allowing the three-fourths to go scot free? He would prefer to see pharmacy acts abolished altogether.

F. G. W., Darlington (246/60), would expunge from clause 5 the words, "being in business on his own account," so that every registered chemist who elects to pay the guinea subscription, whether in business or not, should be eligible, as many chemists may occupy other positions than actually being engaged in retail business, and yet wish to be members of the Society. "According to the Bill, as it now stands," he asks, "would a chemist, once elected, cease to be a member on giving up business?" He believes the majority of chemists will approve of the rest of the Act, and he cannot imagine anyone disapproving of the curriculum clauses, as, practically, all students undergo a voluntary curriculum at present.

Q. E. D. (247/65) thinks it would be sufficient to give chemists the sole right "to compound prescriptions containing poison." He is correct in assuming, however, they have this right essentially under the law as it stands.

### Reform of the Pharmaceutical Society.

SIR,—In reply to Mr. H. H. Millhouse and his personal sneers and insinuations, let me refer him to an illustration used by Mr. Cross at the last meeting of the Pharmaceutical



Council concerning an instrument of warfare common among savage tribes—viz, the boomerang—which, when used ignorantly or unskillfully, comes back and hits the man who wields it. So let it be with all unfair and un-English methods of attack, which are far more likely to hinder than to assist in the promotion of urgent and needful reforms.

Mr. Millhouse errs in assuming that the dissatisfied party are not cognisant of the amount of time and labour that the President and his colleagues give to the work of the Society. We are quite prepared to admit that they work both hard and successfully in their own way "for the purpose of advancing chemistry and pharmacy, and promoting a uniform system of education of those who should practise the same," and also in providing a most necessary Benevolent Fund; but, on the other hand, we do hold them and the policy which they have pursued to a very large extent responsible for the almost complete neglect of one of the further objects of the establishment of the Society—namely, "the protection of those who carry on the business of chemists and druggists"; and we are bound to affirm that to their long and persistent disregard of these interests the present unsatisfactory and humiliating position of the trade is mainly due.

The policy of the Council has also been at fault in that they have not exerted themselves to reorganise and strengthen the Society by taking in all the qualified members of the craft, and by omitting to bring it into touch and sympathy with the times, thus giving it a bad name through the country generally.

Will the electors consider well whether they will allow this same ruinous policy to be continued, or will they elect to represent them upon the Council candidates "jointly and severally pledged to restore the care of trade interests to its proper place in the Society's policy"?

I am, Sir, yours faithfully,  
St. Mary Street, Cardiff. ALFRED COLEMAN, Ph.C.

SIR,—Will you allow me to follow up my letter of last week with a suggestion for improving the Council of the Pharmaceutical Society as a representative body?

Much of the discontent which exists regarding the action or inaction of the Council probably arises from the fact that what might be termed the "working classes of pharmacy" have not been adequately represented in the Council chamber. Of late years the working-men have sent their own special labour representatives to our national Parliament, supporting them in that position by voluntary subscriptions. I am disposed to think it would be well to follow their example with reference to our own little parliament. It is extremely difficult to find men familiar with the needs of the class of chemists before mentioned, and yet able to spare time and money to attend the Council meetings regularly. It is true "the Society" pays travelling expenses, but that is not sufficient, and I for one would gladly subscribe a guinea a year (for three years) to a fund for trying the experiment. Where so much is at stake it should not be difficult to raise 100% or 150%; and probably this should meet the case at present.

Yours respectfully,  
FRESHFIELD REYNOLDS.

#### The Medicine Stamp.

We have received two letters in support of the one published a fortnight since over the signature of "John Jones of Jonesville," advocating the abolition of the medicine stamp, and pointing out that the present time was a suitable one for agitating the question. Our correspondents "J. N. B. H." and "Facta non Verba" give us little beyond repetitions of the arguments advanced by Mr. Jones. "J. N. B. H." complains of the tax because it harasses and vexes the chemists at every turn. [That is, we suppose, when he tries to evade it; it does not harass him if he submits to it.] He says:—"See how carefully he words his handbills and labels when venturing to present a new or cheap preparation to his customers, lest he be found infringing the patent-medicine laws! And why should this be? Ought the chemist to be less free to extol his inventions than any of his neighbours? The medicine stamp does good to no one, neither the chemist nor his customers, and the strongest reason for its abolition, to my mind, is its unfairness. It is the sick, the enfeebled,

and the ignorant who pay and get nothing in return. If the principle is right, then I contend it does not go far enough, for the rich should contribute their fair proportion, as well as the poor.

"If a stamp were required for each prescription, and a tax imposed on every visit of the doctor, it would be deemed monstrous; but where should we draw the line? So far as my experience goes, a very large proportion of those who consume these medicines are the poor operatives of our mills and workshops, who in their distress resort to them, hoping to obtain such relief as will enable them to continue at work and avoid the dread expense of a doctor's bill. If the stamp—which they invariably have to pay for in these cases—implied a Government guarantee of the undoubted efficacy and value of the medicine to which it is attached, something might be said in favour of its retention; but even this is denied them, and they get absolutely nothing in return. To tax the weak and distressed, and let the hale and hearty go free, is contrary to all right principles."

"Facta non Verba" also argues that it is the poorer classes who extensively purchase stamped medicines, and his point is that the extra cost occasioned by the stamp is a hardship to them. But later in his letter he says, "Let the public know the immense dangers attending the employment of quack medicines, fostered, protected, and recommended by the presence of a Government stamp upon each bottle, and they will"—what? Insist on the stamp being doubled or quadrupled? That would be logical, we should suppose, but it is not the proposal "Facta" puts forth. All he says the public would do would be to purchase medicines originating from well-known manufacturers, or prepared by the local pharmacist.

SIR,—Whether the medicine stamp should be abolished *in toto* or not I leave to wiser heads than mine to decide, but I think it high time that the sheets of stamps should be perforated and gummed.

Yours obediently,  
H. B. S. (240/41.)

#### Unguentum Resinæ Acidum. (Manchester Royal Infirmary.)

In reply to a correspondent, Mr. Hugh M. Massingham, the senior dispenser of the Manchester Royal Infirmary, sends us the following formula for the above-named preparation:—

##### Burn Ointment.

Yellow resin ..	..	..	4 oz.
Yellow wax ..	..	..	20 " (in winter 10 oz.)
Olive oil ..	..	..	20 " 30 "
Venetian turpentine ..	..	..	8 "
Burgundy pitch ..	..	..	4 "
Oxide of zinc ..	..	..	4 "
Solution of carbolic acid ..	..	..	10½ fl. oz.

Melt the resin, wax, Venetian turpentine, and pitch together with the olive oil by a gentle heat. To this add the oxide of zinc and carbolic acid, previously rubbed together, and stir constantly until cold.

##### Solution of carbolic acid for the above:—

Carbolic acid, pure ..	..	..	8 oz.
Glycerine ..	..	..	4 fl. oz.
Water ..	..	..	16 "

Mix.

#### The Sheffield Drug Raid.

SIR,—Will you allow me, through your valuable journal, to make a few remarks on the above subject, as it is well known locally to whom your correspondent refers. In the first place, I was not aware that we had a wholesale man in the town, except drysalts, &c. It is perfectly correct that I did send to the well-known wholesale man for the articles he mentions in his report; the only thing I had not in stock was aqua dest. to make the aq. chloroformi prescribed. The wholesale man being our local luminary in matters pharmaceutical, I thought there might be sufficient reciprocity in the trade that he might oblige me, as he has frequently done previously, owing to the small craft not being prepared for out-of-the-way things. I do not think there was anything



very wily in the affair, as I told him what purpose they were required for, attached name, &c. I shall take no notice of any further correspondence, but will leave it to the trade to judge if it is fair criticism.  
T. S.

### LEGAL QUERIES.

242/54. *Capsicum*.—You did not enclose the label you referred to.

248/58. *Delta*.—The assistants' certificate of the Apothecaries' Society does not carry exemption from jury service.

248/45. *G. P.*—Phosphorus paste which contains no scheduled poison may be sold by unregistered persons.

242/59. *Assistant*.—If you give notice to leave on January 15 your time of service expires on February 15 at noon.

243/13. *R. L.*—We do not know of any law which would prevent a registered chemist and druggist describing himself as "consulting chemist."

248/61. *Nemo*.—You may adopt what style you like to trade under, so long as you do not take undue advantage of any existing firm's title.

246/54. *Climax*.—Read our legal reports published June 11, 1887, and July 21, 1888, and draw your own conclusions; or show them to your solicitor, and then take his advice.

242/54. *Capsicum*.—Your label recommends the medicine as a remedy for nervous debility; its display, therefore, in your shop-window would be a technical infringement of the Indecent Advertisements Act.

240/61. *Jenkins*.—You could only prevent the design being copied for similar goods by getting it registered as a trade mark for your medicines. You should have sent us a stamped addressed envelope for the return of the cuttings.

242/26. *W. T. C.* asks:—Is the remark made by Mr. Finlay correct—"A registered chemist is exempt from serving on a jury"? Should it not be that some few of the chemists—namely, those who are pharmaceutical chemists—are exempt, for which advantage they are required to pass the Major? [Yes. On this point you are a better lawyer than the eminent Q. C.]

248/42. *Cognosco*.—Deliberate and continual disobedience to your reasonable orders would justify you in cancelling an apprentice's indentures, but a court would have to decide whether your complaint was strong enough. You had better not take that step without using all available means first, and then after laying all the circumstances before a lawyer.

249/7. *L. B. M.*—The case now *sub judice* only applies to unqualified persons *selling* poisons; it would not affect unqualified persons who may be engaged by boards of guardians or other public bodies. There is no Poor Law Board. We are not aware that the Local Government Board have formed any definite rules as to the engagement of dispensers.

243/28. *J. W. G.*—We do not know whether anyone claims the exclusive right to the title "Dr. Bow's Liniment." If anyone has such a claim perhaps he will intimate it. But we should suppose, if there be such a person, he has sacrificed any rights he might have possessed by lack of due diligence

in maintaining them. We presume it would be easy to prove that scores of chemists make their own article under this title, and so label it.

245/9. *W. F. G.*—You asked if your card was legal, and whether it could "in the least be considered to infringe on the Dental Act." We gave you our opinion that the card was legal, but we cannot guarantee that everybody else will take the same view. We are reasonable and intelligent; but it is a melancholy fact that there are people in the world who are not. We cannot suggest any modification of your phraseology.

244/33. *G. B.*—*Apprentices*.—The mere absenting himself by an apprentice does not cancel the indenture. When, however, he disappears and takes the contents of the till with him, having previously habitually plundered his master, the master is apparently entitled to discharge him (see *Cox v. Matthews*, 2 F. & F. 397). In another case, where an apprentice's conduct had been generally unsatisfactory, and he filed a bill in Chancery to make his master take him back, the bill was dismissed, but without costs (see *Brown v. Banks*, 3 Giff. 190). With regard to the return of the premium, if the only provisions for return in the indenture are in case of death or illness before the half-time has expired, the court would in all probability hold that the master was entitled to retain the premium as damages for loss of services of the apprentice. If you are not afraid of law, therefore, you might, if the boy comes back, at once discharge him, or, perhaps better, at once write to his father and to him at his father's house to that effect, and if his father sues for the return of the premium defend the action. The case would be an interesting one.

247/51. *Justitia*.—The master is not entitled to make any deduction from the assistant's wages during such time as he is absent from illness. This was clearly decided in the case of *Cuckson v. Stoves* (28 L. J., Q. B. D., 25). In that case a man was engaged as a brewer at 2l. 10s. per week, and entered upon his duties, but after some time fell ill. On his recovery he returned to work, and his master continued to pay him the 2l. 10s. per week, but a dispute arose as to the wages during the time the servant had been away through illness. On action brought it was held that the wages continued to be payable during the time the servant was absent through illness. The fact that the assistant has accepted his salary, less the three days, does not make any difference, unless there was some new consideration to induce him to do so. It is a well-known principle of law that a man may take 10s. in the pound for his debt, and give a receipt in full discharge, and immediately after commence an action for the balance, and there is no defence to such action. If there is a new consideration, as, for instance, payment before the money was actually due, or release given by deed, or anything of that kind, then the balance is irrecoverable. Here there appears to be nothing but an acceptance, probably under pressure, of less than what was due, and there is nothing to disentitle the assistant from proceeding against the master for the amount improperly deducted.

### DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

239/43. *X. Y. Z.*—(1) Your first formula is for Begbie's mixture, and the first ingredient is dilute nitric acid. (2) *Lin. tereb. co.* The "co." is doubtless a *lapsus pennæ*. (3) Bismuth subnitrate and sodium bicarbonate react chemically, carbonic acid gas being liberated. See "The Art of Dispensing," page 154.

*Liq. Hyoscyami and Potass. Biearb.*

*SIR*.—A mixture is very commonly prescribed here containing, *inter alia*, potass. bicarb. and liq. hyoscy. "Bastick."



These two ingredients when mixed give a rose-coloured solution. Can any of your readers inform me what the action of the potass. bicarb. is upon liq. hyoscyami?

Southport.

SARUM. (239/60.)

#### The Illegible Prescription.

SIR,—The second ingredient in prescription, I think, is this: tinct. hl. radix—that is, tinct. hellebore radix. Probably an old prescription. Dispenser should have given date, and also what it was to be taken for, as otherwise there is nothing to go upon.

G. S. (241/30.)

SIR,—The prescription can be read as—

Glycerini .. .. . ʒiv.  
Tinct. sumbul radix .. .. . ʒiij.

or—

Glycerini .. .. . ʒiv.  
Tinct. hellebor. rad. .. .. . ʒiij.

The first would, I think, be the right one of the two.

Yours truly,

15 City Road.

MARIUS GAZULLY.

SIR,—I hope some correspondent (American, perhaps) will favour us with an interpretation of "the second ingredient." My three guesses (probably wide of the mark) are:—(1) Tincture illicii radix; (2) Tinctura hellebori radix (forgiving the syntax); (3) Tinctura illicii religiosi.

Yours respectfully,

Welwyn, February 12.

EDMUND LAWBRANCE.

#### Liquor Hamamelis.

SIR,—In answer to your correspondent "X. Y. Z.," we frequently dispense liq. hamamelis, which we consider to be "Hazeline."

Yours truly,

10 Worcester Street, Birmingham,  
February 8.

G. H. TAYLOR.

#### A Point about Suppositories.

SIR,—I had the following to dispense:—

Ferri pernit... .. grs. xij.  
Morph. mur... .. gr. j.  
Ol. theobrom. .. .. q.s.

Misce et div. in suppos. vj.

Sig.: One every three hours.

On the day following the doctor called and complained that the suppositories did not dissolve. Is it the case that the addition of certain substances to oleum theobroma raises its melting-point?

I enclose part of the mass that was left over, also a small quantity of the ol. theoh. You will notice the difference in the melting-point.

Yours truly,

February 4.

PERPLEXED. (239/28.)

[This is a curious point, and one which we do not remember having been noticed before. The melting-point of the oil of theobroma is 32° C., and of the suppository 42° C. It is possible that the ferric nitrate may play a similar part to what nitric acid would do, and this is just what it would be interesting to determine by experiment. We have not time to follow the matter up. Will someone do so?—ED. C. & D.]

#### Cocaine Lotion.

SIR,—Replying to your correspondent "Heder's" question re action of heat in the cocaine lotion mentioned in your issue of January 25, 1890, "Heder" will find some little difficulty in dispensing as written, owing to the oily manner in which the cocaine acts, as it assumes a liquid form when the mixture is heated. Upon standing some time or until cold, a heavy white mass, or head, falls, which will, however, dissolve after some hours if well shaken. There is evident action between the cocaine and boric acid, with the result of an ultimately soluble pearl-like solid. It would in this case

be perfectly justifiable to substitute the hydrochlorate, the dilution preventing subsequent action, it being for an eye-lotion, and there can be no difference in the action—at least, I presume not. Time would be a considerable factor.

Yours faithfully,

February 11.

FARO. (245/35.)

#### An Iron Mixture.

SIR,—The following prescription was handed in to-day. What should have been done?—

Tinct. ferri mur. .. .. ʒiij  
Tinct. uvæ ursi.. .. . ʒss.  
Infus. buchu ad.. .. . ʒviij.

M.

Yours truly,

Birmingham, February 7.

INCOMPATIBLE. (241/23.)

#### MISCELLANEOUS INQUIRIES.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

246/27. R. Thomas.—Pharaoh's Serpents.—See June 22, 1889, page 865.

Starch Gloss.—Several correspondents have asked us when the notes on this matter appeared. In our issues of December 21, page 876, and January 4, page 28.

226/6. Per Ardua.—We shall give the matter our attention.

239/11. J. D. Vint.—The cotton-wool respirator is used for protecting from inhalation of dust.

239/20. Seedsman.—Blake & Mackenzie.

239/32. Inquirer writes:—"A controversy occurred a few days ago between two medical men as to the proper side to place upon the wound when using lint. One said the 'fluffy' side, the other the smooth. Kindly give me the decision." [We have never seen any other than the fluffy side used.]

239/54. Mephistopheles.—The article on counter-prescribing in our DIARY is the best you can get on the subject.

239/65. Amylum has some Starch which, when moistened with water, becomes quite yellow, and wishes to know why. Starch has to be bleached, and sometimes "blued" (as nearly all laundry starches are), before they can be placed upon the market; but we have not met with any which are pure yellow when damped, except those which are used for starching window curtains.

239/67. R. H.—See our last issue of 1889 for an account of the Minor examination. You have to know all about the barometer, thermometer, hydrometer, and specific gravity generally.

239/70. Cloves.—We do not have a formula for liq. papain. e. iridin. co.



240/37. *Alpha* writes:—"I find the strong solution for making Easton's Syrup (Martindale) becomes quite solid after keeping a day or two. How can it be prevented?" Mr. Martindale says by reducing the quinine to  $\frac{1}{4}$  grain per fluid drachm.

241/59. *Oxford*.—F.S.Sc.—We are not sure what this stands for, but think it is used by the members of the Society of Science, Letters, and Art, of London, the secretary of which is Dr. Sturman, 160 Holland Road, W.

241/62. *H. Edwards*.—We have not space to go into taxidermy to an extent which would please you.

The Wigan Prosecution.—(239/60.) *Sarum* asks if Mr. Phillips would give fuller particulars of his case, and report the results of the prosecution should such ensue.

241/31. *Danum*.—The powder you send us is gallic acid, and is used, in the proportion of 3 grains to every ounce of water, to bathe the plates for one minute previous to developing the same. The plate is drained, and then developed with a well-restrained, strong in pyro, developer, so as to obtain absolutely clear lines and opaque ground.

32/90. *J. F. Richardson*.—Burnt cork is the only thing used by negro comedians. It can be got mixed with a hard fat. In this form it is not affected by the perspiration. Wood charcoal is useless.

244/49. *Sulph*.—The best way to make solution of ammonium sulphhydrate is to pass sulphuretted hydrogen into solution of ammonia until it absorbs no more, then dilute with half its volume of solution of ammonia, and allow to stand until clear.

243/29. *Still* and *H. E. C.* ask similar questions regarding the best Still for Making Distilled Water. The quantity required is a gallon or two per day. We assume that both correspondents have an abundant supply of water, and that the use of this for condensing purposes will not be a prohibitive item in the work; also that they will use gas as fuel the greater part of the year. The cost, to begin with, will be about 6d. per gallon for gas. The simplest apparatus will, in most cases, be found to suffice, as those with ingenious arrangements for rapid condensation are generally costly, and to the ordinary retail chemist it is not a matter of importance whether he obtains a gallon or two gallons of distillate per hour. The old-fashioned still and condensing worm is, therefore, suitable. These can be bought ready-made from any sundries house. Bracher's automatic still we can also recommend. An apparatus might be made by a local tinman, the still to consist of a 1-gallon shallow and broad tin kettle, the lid being replaced by a curved still head, which should gradually narrow to a diameter of about 1 inch. The spout of the kettle may be converted into a small funnel. The condensing worm may be fitted in a castor-oil tin, petroleum drum, or anything else which is of little value. A worm  $\frac{5}{8}$ ths of an inch in diameter is a suitable size, and the length of it should be about 15 feet. It is connected to the still head by means of a suitable adaptor. The metal used throughout should be well-tinned sheet iron. Such an apparatus as this would cost 8s. or 10s. In using it the still should only be partially filled with water, and in order to distil continuously all the water put into it should have permanganate of potash and sulphuric acid added, in the proportion of 2 grains of the former and 15 drops of the latter to each gallon. This addition fixes the ammonia, and permits the use of the warm condensing water, which may be poured into the still at the rate of  $\frac{1}{2}$  a pint occasionally, so that distillation is not materially checked.

243/5. *Bismuth*.—See the note on "Bismuth Hair-dye" in our issue of November 23, 1888, page 721.

243/13. *R. L.*—It is not possible by any means, that we are aware of, to remove the oil and filth from the upper part only of a meerschau pipe.

243/37. *Pompeii*.—The formula is what is given in the patent, and you should not really make the preparation. What it seems to require is more aniline black and less blue.

242/54. *Saccharine*.—Solution of oxalic acid and solution of chlorinated lime are both used for removing ink-stains. Which of them is "Vanint" you can only determine by trying.

247/74. *T. P.*—Messrs. Burgoyne, Burbidges, Cyriax & Farries are agents for Schuhkraft's crystallised Peruvian bark.

247/58. *Laburnum*.—We are obliged for your suggestion for a competition, which shall be considered.

248/16. *J. A.*—We thank you for your suggestion for a competition; but we do not much fancy the task you offer us. Any way, we may remark that we intend to retain ourselves as judges in our own competitions. Correspondents who are not content to trust our competence or fairness have a very easy remedy.

247/10. *J. T. L.*—Gresswell's "Veterinary Pharmacology and Therapeutics" (5s.), or Gresswell's "Veterinary Pharmacopœia" (10s. 6d.), both published by H. K. Lewis, 136 Gower Street. Dalziel's "Diseases of Horses" (1s.), published at 170 Strand, might suit you.

240/55. *B. S.*—Gargot.—The disease is hereditary, and flock should have new blood introduced; also change of pasture to high ground. Give the ewes sodii chlor. colorat. sec. artem, 5j. omni die c. cibo. Paint the lambs' joints with potass. iodid. gr. x. in aqua 5j. omni die.

8/2. *T. D. J.*—We cannot make patent searches for subscribers. The best way of drying pills generally is by keeping them in trays in a steam-heated apartment at a temperature of 90° to 100° F. We could not give you any special suggestions without knowing the composition of the pills, and perhaps not then.

238/32. *Antipyrin*.—(1) See our issue of March 9, 1889, page 340, for remarks on children's cough and formulæ for mixtures. In other back numbers there are also formulæ. (2) *Phosphorus Paste*.—"Antipyrin" asks our advice regarding the following formula:—

Phosphorus .. .. .	1 oz.
Roast-beef dripping .. .. .	1 lb.
Wheat flour .. .. .	1 "
Sugar .. .. .	$\frac{1}{2}$ "
Powdered biscuit .. .. .	$\frac{1}{2}$ "
Water .. .. .	q.s.

The plan generally given for making this is to dissolve the phosphorus in the dripping. Our correspondent has tried this, but has "not been able to make a satisfactory paste. The phosphorus will not mix with the fat when melted and stirred in an evaporating-dish. He once tried it this way, and it went into a tremendous blaze, and, being in the yard, it was allowed to burn off." The formula is a good one, but the direction to dissolve the phosphorus in the melted fat is obviously erroneous, since phosphorus is but sparingly soluble in fats. Still, what is wanted in this case is the fine division of the phosphorus, and this can be readily accomplished in the following manner:—Warm a large porcelain mortar and pour 6 oz. of boiling water into it; in this place the phosphorus. Meanwhile melt the dripping over a water-bath, so that it may not be over-heated, and pour



it in the mortar whenever the phosphorus has become liquefied. Now stir assiduously, whereby the phosphorus will become fairly divided, the operation being assisted by the addition of some of the powdered biscuit; then add the rest of the solids, with a little methyl blue dissolved in spirit, and sufficient water to make the paste of the proper consistency.

240/60. *Pix*.—Your sample seems to be ordinary tar oil, and could be obtained from any tar distiller.

221/43. *B. C.*—We have given, recently, several of the formulæ which you ask for. **Root-beer Extract**.—Sassafras, 1 oz.; yellow dock, 1 oz.; wild-cherry bark,  $\frac{1}{2}$  oz.; pimento, 1 oz.; winter-green, 1 oz.; hops,  $\frac{1}{4}$  oz.; coriander,  $\frac{1}{2}$  oz. Bring these materials to the proper condition by bruising, and pour upon them 6 oz. of proof-spirit. After macerating for half a day pack in a percolator and add other 2 oz. of proof-spirit. When the liquid ceases to drop pour on a few ounces of water. Collect the first 6 oz. of percolate, and reserve. Then continue percolation with a pint of water. Evaporate this percolate to 4 oz., and add to the first one. **Chocolate-cream Syrup**.—Mix 4 oz. of Van Houten's cocoa and 2 drachms of bicarbonate of soda with a pint of boiling water, and add 6 pints of hot syrup. When cold, add vanilla flavour and foam essence.

240/51. *Ticket-writer*.—(1) Apply to any sundries house. (2) Hop-flavoured quinine bitters should not be difficult to make, taking a weak quinine mixture as the basis and flavouring with tincture of hops and aromatics. We do not have a working formula.

243/52. *Semaj*.—You would find soda ash as cheap as any alkali for dissolving arsenic, if you are to make the solution in the same way as liquor arsenicalis. The proportions would be the same—equal parts of the alkali and arsenic. Or you may take 2 parts of arsenic, and 1 part of caustic soda (70 per cent.), and boil in 10 parts of water until a clear solution is formed. This would be the cheaper way.

244/20. *Yorkshire*.—Judging from the amount of alkali used in making Non-poisonous Sheep-dip, we should say that the insoluble matter which separates from it is neither cresylic nor carbolic acid, but unsaponifiable tar oil. Whether the deposit is an active parasiticide or not is uncertain. It is, at least, a good deodorant, and the dip would be better if the deposit were well stirred through the bulk.

246/74. *F. J. A.* says a friend of his cleans the Keys of a Cornet with paraffin; but it leaves a disagreeable odour behind it. How is that to be remedied? A little citronella oil added to the paraffin would be advantageous, but the best plan would be to wash the keys with methylated ether afterwards.

246/73. *Abby*.—Tobacco-paper for Fumigating.—Dissolve 1 oz. of nitre in 1 pint of tobacco-juice, and steep unsized paper in the mixture. Afterwards dry in a warm place.

248/1. *Quinine*.—Cleaning Artificial Teeth.—There is nothing special for this purpose. A hard brush is a requisite, and precipitated chalk, with a little soap, assists as well as anything else.

247/48. *Ol. Limon*.—Soluble Essence of Lemon.—Lemon differs very materially from ginger. The latter is employed for its pungency, which resides in certain resins. These can to some extent be rendered "soluble," but the same thing cannot be done with essential oils. It is for that reason that soluble lemon and soluble ginger are so widely different in character. It is undoubtedly easier to make the

lemon essence from the fresh peel than from the oil. The following is a suitable process:—Grate off the yellow portion of the peel, which alone contains the aromatic oil; 8 oz. of this will make 1 pint of essence. Use for menstruum a mixture of rectified spirit 3 parts, and water 2 parts. Pour 12 oz. of this upon the grated peel, and macerate for four days, shaking several times a day; then press out the tincture, and again macerate for two days in 6 oz. of the menstruum. Press as before. The product should measure about 18 oz. To this add 30 grains of phosphate of soda, and 10 grains of dried chloride of calcium, each dissolved in 6 drachms of water. Agitate well, and set aside for a day; then filter, and make up to 1 pint with rectified spirit.

247/62. *Calder*.—Spt. *Ætheris Nitrosi* (Veterinary).—Some surgeons dilute hyponitrous ether with methylated spirit, but it would undoubtedly be illegal to sell such a mixture. Hyponitrous ether is very difficult to keep, must be obtained fresh, and the whole of it diluted when the bottle is first opened. A mixture of spirit and water is not a good diluting solution, as the nitrous ether rapidly undergoes decomposition in presence of water.

247/46. *Erica*.—Perfumes from Pomades.—The pomade may be macerated in the spirit at the ordinary temperature. It is unnecessary to heat, but it is desirable to keep in as cold a place as possible for a few hours before and during filtration.

247/54. *Craven*.—Sheep-dip (Tarry).—This can be made from heavy tar oil in the following manner:—To 1 gallon of the oil add 3 lbs. of caustic soda (60°), dissolved in  $\frac{1}{2}$  gallon of water. Agitate for some time; then gradually heat the mixture, constantly stirring, and add 2 lbs. of refuse fat or tallow, and 2 lbs. of soft soap, just when the fluid begins to boil. Continue to heat until thoroughly saponified, a point which may be judged by the liquid clearing up; then gradually dilute to 4 gallons with water. Set aside to settle, and decant the clear portion.

#### Information Supplied.

248/52. *Oil of St. John's Wort*.—In the "Pharmacopœia Universalis," by J. L. Jourdan, of Paris, there are several ways of making this. (1) *Ol. sem.* is made thus:—Seeds of St. John's Wort, any quantity. Bruise them, enclose the paste in a bag, express the oil without heat, and filter. (2) Flowers of St. John's Wort, 1 part; olive oil, 4 parts. Expose them to the rays of the sun for one week, then boil slightly, and strain. Repeat the operation two other times, the second with dried flowers and for a month. (3) Flowers of St. John's Wort, 3 lbs.; olive oil, 3 lbs.; white wine, 6 oz. Boil to the consumption of the humidity, express, and add Venice turps, 1 lb.; saffron, 2 drachms. Strain at the end of twenty-four hours. (4) Flowers of St. John's Wort, 72 parts; olive oil, 144 parts; turpentine, 72 parts. After 12 hours' digestion in a warm place, set aside to cool, express, and add powdered saffron, 1 part; triturate together. It is slightly excitant, and is considered vulnerary, anodyne, and pectoral.

E. H. CROYDON.

I have frequently had to make the above for a customer, who provided the flowers. The method of proceeding was to put the flowers in a bottle or jar with a wide mouth, and pour sufficient olive oil over them to cover. Place the whole in a large saucepan of water, and boil till the oil is of a dark red colour. Strain, press, and filter.

SOMERSET. (238/51.)

*Oleum hyperici*, *Balsamum hyperici simplex*.—Flor. hyper., 4 oz.; ol. olivæ, 2 lbs. Infuse till oil is well coloured. Originally the expressed oil of sem. hyperici was used instead of olive oil.

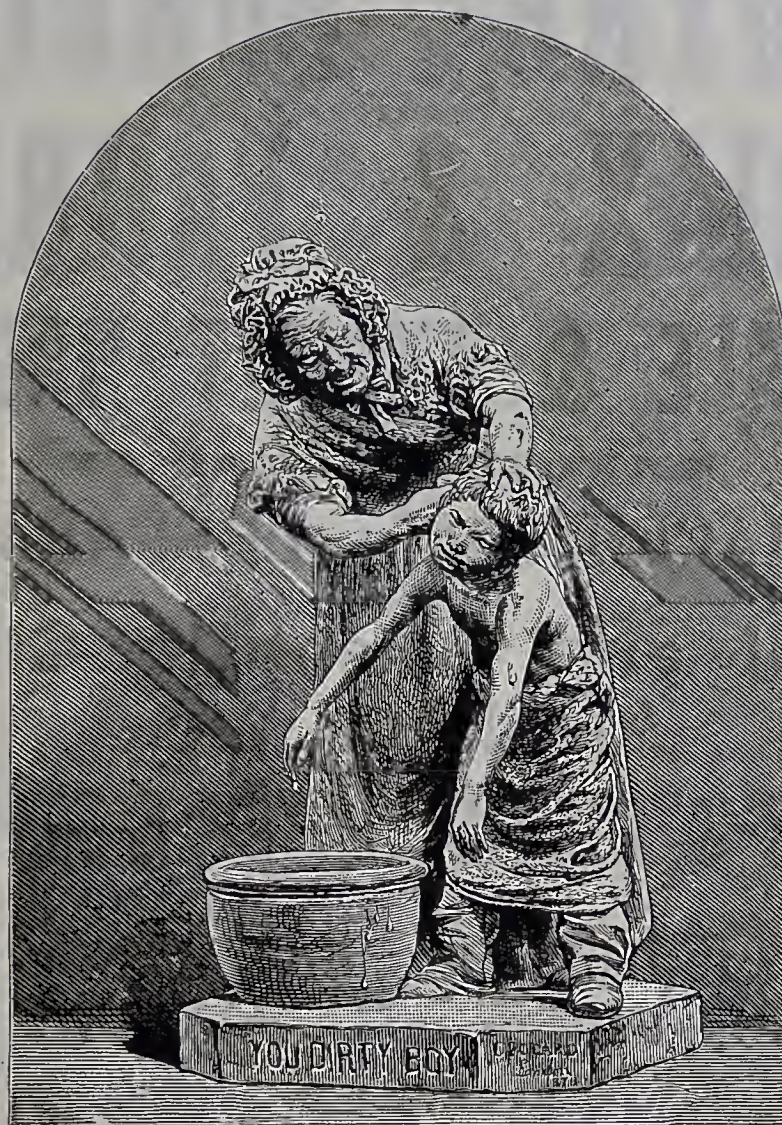
J. BURT, Worthing.

Oil of St. John's wort is occasionally sold in this neighbourhood as a domestic remedy for bruises. It is known to us as *oleum hyperici* (*Hypericum perforatum*). It is also sometimes termed red oil. It may be prepared by macerating 4 oz. of the tops in a pint of olive oil for a few days, then filter.

F. W. HOOD, Reading.



# YOU DIRTY BOY!



# PEARS

## PRICE LISTS AND SHOW CARDS

*Sent, Carriage Free, on application to the Depots.*

**LONDON :** 71-75 New Oxford St., W.C., **LONDON.**

**NEW YORK :** 365 & 367 Canal Street, **NEW YORK.**

**MELBOURNE :** 484 Collins Street, **MELBOURNE.**



ESTABLISHED OVER 140 YEARS.

# BURGOYNE, BURBIDGES, CYRIAX & FARRIES, WHOLESALE & EXPORT DRUGGISTS,

MANUFACTURERS OF

PHARMACEUTICAL PREPARATIONS,

AND MAKERS OF

Technical and Scientific Chemicals,  
Alkaloids, &c.,

IMPORTERS & DISTILLERS OF ESSENTIAL OILS,

DEALERS IN

Druggists' Sundries, Chemical & Pharmaceutical  
Apparatus, Surgical Instruments, Patent  
Medicines, &c., &c.

New remedies stocked immediately upon introduction. Preparations made according  
to the formulæ of all the known Pharmacopœias. Correspondence and Lists  
in all foreign languages.

SAMPLES AND SPECIAL QUOTATIONS UPON APPLICATION.

## PRIZE MEDALS:

PARIS, 1867.

CALCUTTA, 1884.

PARIS, 1878.

EDINBURGH, 1886.

Offices: 12 COLEMAN STREET;  
Laboratories and Warehouse: 16 COLEMAN STREET,  
**LONDON, E.C.**

WHOLESALE DEPOT FOR

PARKE, DAVIS & CO'S Fluid Extracts, Pharma-  
ceutical Preparations, &c., &c.

DE LAIRE'S Vanilline, Heliotropine, Coumarine, &c.

CHAUTEAND'S Seidlitz and Dosimetric Granules.

THE RIO CHEMICAL CO'S Aletris Cordial,  
Celerina, and Pinus Canadensis.

VON HEYDEN'S Salicylic Acid and Salts.

MALTOPEPSYN, &c.





# BICARBONATE OF SODA,

REFINED AND RECRYSTALLIZED.

PURE AND CHEAP.

## ANALYSIS.

Bicarbonate of Soda	...	...	...	...	97'20
Mono Carbonate of Soda	...	...	...	...	1'90
Sulphate of Soda	...	...	...	...	trace
Chloride of Sodium	...	...	...	...	0'35
Moisture	...	...	...	...	82
Insoluble	...	...	...	...	nil

# PURE ALKALI,

GUARANTEED 58 DEGREES,

EQUAL TO 98 PER CENT. OF CARBONATE OF SODA.

Most economical form of Soda for the use of Printers,  
Bleachers, Dyers ; Glass, Paper, and Soap Makers.

# SODA CRYSTALS

OF THE FINEST QUALITY.

# BRUNNER, MOND & CO., LIM.

*Manufacturers of Soda by the Ammonia Process  
(Solvay's & Mond's Patents),*

NORTHWICH, CHESHIRE.



# SYMES & CO. LIVERPOOL

PHARMACEUTICAL CHEMISTS, EXPORT DRUG MERCHANTS,  
IMPORTERS OF BRAZILIAN DRUGS, AMERICAN AND CONTINENTAL SPECIALITIES.  
ORIGINATORS AND MANUFACTURERS OF

**OL. LAVAND. RECT.**

Largely replacing the Mitcham Oil, 21/ lb.

Hydrobromic Syrup of Hypophosphites.



LAC BISMUTHI.

**OL. LIMONIS RECT.**

Fine quality, keeps well. 6/ lb.,  
Bottles Free.

Lac Bismuthi et Ceril, &c.

## SALICYLIC ACID

AND

## SALICYLATES

MANUFACTURED UNDER KOLBE'S PROCESS BY

J. HAUFF, FEUERBACH - STUTTGART.

To be obtained through all Wholesale Houses in Great Britain and Ireland and from the SOLE AGENTS,

**FUERST BROS.,** 4 COPTHALL BUILDINGS, LONDON, E.C.  
Telegrams—"FUERST LONDON." Telephone No. 462.

## MORRIS & CALLARD,

PONTAMMAN CHEMICAL WORKS,

AMMANFORD, R.S.O., CARMARTHENSHIRE,

MANUFACTURERS OF

ACETIC ACID, P.B., ACETIC ACID FORT., SP. GR. 1.040,  
ACETATE OF SODA,

PURE WOOD NAPHTHA, SULPHURIC ACID, & CHARCOAL

Telegraphic Address: "CALLARD, AMMANFORD."

PRICES AND SAMPLES ON APPLICATION.

## GUSTAVE CLAUDON,

Works at DENAIN and WALLERS (Nord).  
Offices, 18 Avenue Victoria, PARIS.

## ALCOHOLS, ALDEHYDS, ETHERS, Etc.

Ethylalcohols Pure and Absolute. Propyl, Isopropyl, Butyl, Isobutyl, and Amyl-  
alcohols. Ethyl, Propyl, Isobutyl, and Amylaldehyds.

METALDEHYD CRYSTALLISED FOR MEDICAL PURPOSES.

Formiates, Acetates, and Butyrates of Methyl, Ethyl, Isobutyl and Amyl, &c.

Catalogues sent free on application.

Letters to be addressed to 18 Avenue Victoria, Paris.



## SCHERING'S

### PHYSIOLOGICALLY PURE ACID SALICYLIC and its SALTS.

---

THE paper read by M. CHARTERIS, M.D., at the Medical and Chirurgical Society on February 11, shows that artificial Salicylic acid and its salts, although obtained at the highest melting-point, thus, chemically speaking, ensuring the utmost purity, may yet differ in its physiological action from the natural.

B. FISCHER had already shown, in March 1889, in a most valuable contribution to the knowledge of the degree of purity of Salicylic acid used in medicine, that the presence of more or less Creasotic acid could unmistakably be ascertained by the melting-point, and that SCHERING's and Von HEYDEN's specimen of acid, showing melting-points of  $156^{\circ}$  and in the particular case of SCHERING's dialysed  $156\frac{1}{2}^{\circ}$ , containing on independent examination from 1 to 0.7 % of Creasotic acid relatively, being therefore the best artificial acids occurring in commerce, while other makes, running as low as  $153\frac{1}{2}^{\circ}$  melting-point, proved to contain up to  $5\frac{1}{2}$  % presence of Creasotic acid.

Further proof also is that Creasotic acid, having a melting-point of  $150^{\circ}$  to  $151^{\circ}$ , the more or less presence of Creasotic acid in Salicylic acid would of necessity incline the melting-point towards  $150^{\circ}$ .

It is much to be regretted that B. FISCHER's interesting paper in the *Pharmaceutische Zeitung* was not translated and published at the time in one of the leading pharmaceutical prints of this country, which would have saved a great deal of misconception, and would have enabled many of our able British Pharmacists to have examined the quality of Salicylic acid and the salts in use.

The principal question is now for the medical practitioner to consider whether the presence of 1 % Creasotic acid in Salicylic acid, and consequently  $\frac{1}{2}$  % in the salts, would cause inconvenience to his patient, especially when knowing that Creasotic acid is a very soluble chemical body, and therefore passing out of the system readily enough.

Important it is for the profession and the trade to know that the Chemische Fabrik auf Actien, vormals E. SCHERING, Berlin, are now making a physiologically pure Salicylic acid and also its salts, and we are now receiving these preparations at a slight extra expense.

Even the most timid of the consumers may then be able to indulge in a luxury at a very low cost, and need not be taxed unnecessarily by the extravagant price of the naturally obtained Salicylic acid.

Yours respectfully,

**A. & M. ZIMMERMANN,**

SOLE WHOLESALE AGENTS.

London, February, 1890.

P.S.—The melting-point of the natural acid is  $156.8^{\circ}$  and that given in the P. B. is  $155^{\circ}$ .



London International and Universal Exhibition, 1884, Gold Medal Awarded for our Pharmaceutical Preparations.  
Calcutta Exhibition, First-class Certificate and Two Prize Medals Awarded for our Pharmaceutical Preparations

# HEWLETT'S MIST. PEPSINÆ CO. C. BISMUTHO.

Highly recommended in various forms of dyspepsia, having a direct action upon the mucous membrane of the stomach and intestines as a sedative. It can be administered with marked and almost instantaneous effect in the irritative form of dyspepsia more especially when *pyrosis* is a conspicuous symptom, and pain occurs an hour or more after food. In simple neuralgic gastric pain following eating, occurring in feeble subjects, it is especially indicated, and even in *carcinoma* it has been used with great success in alleviating pain and vomiting.

In the dyspepsia of patients dependent upon some organic disease, and where there is a decided loss of nerve power, it is of singular service. Thus, for instance, a person after a meal complains of a peculiar gnawing and emptiness, with slight pain at the epigastrium, evident signs of general relaxation and loss of nerve power, clinical experience has shown that it is of great service as a tonic and stomachic. A portion of its value arises, it may be, from its action upon the spinal motor nerve centres. Be these things as they may, experience has abundantly demonstrated the value of the compound as a stomachic, anti-dyspeptic, and tonic, in general functional atony and relaxation, and in the various forms of dyspepsia, constipation, or diarrhoea, connected with atony of the visceral muscular coat, the Mist. Pepsinæ Co. c. Bismutho is a very valuable remedy. In the *exhausting purging of Phthisis*, accompanied with night sweats and restlessness, Dr. MATHEWS, of Nantwich, has used it with marked and appreciable effect.

Price (in England) 10s. 6d. per pound.

Physicians will oblige, when ordering Mist. Pepsinæ Co. c. Bismutho, by writing Mist. Pepsinæ Co. (Hewlett's),

Packed (for Dispensing only) in 10-oz., 22-oz., 40-oz., and 90-oz. Bottles.

## LONDON MEDICAL RECORD REPORT.

MISTURA PEPSINÆ COMPOSITA CUM BISMUTHO.

"This combination of Messrs. HEWLETT is one which has been extensively tested, and with good results. It is justly popular in the profession as a very valuable and effective combination. It serves not only to improve aepsia, but to lessen the gastric pain and to facilitate difficult and painful digestion, without setting up any evils of its own. It is a very good crutch for persons of weak stomach to lean on."—January 15th, 1881.

## C. J. HEWLETT & SON,

MANUFACTURING CHEMISTS,

40. 41 & 42 CHARLOTTE STREET, LONDON, E.C.

[Established 1832.]

# TOWLE'S CHLORODYNE

In COUGHS, ASTHMA, BRONCHITIS, INFLUENZA, &c., its effects are truly wonderful, immediately relieving the tightness of the Chest, allaying irritation of the Throat, promoting Expectoration, and speedily and effectually subduing the Cough.

It soothes the weary nohing of CONSUMPTION, relieves the harassing Cough, and often prevents those sleepless nights so trying to the sufferer.

In CHOLERA, DIARRHŒA, DYSENTERY, &c., it has proved itself a most valuable specific, quickly relieving the pain and spasms, and seldom failing to check the disease; for which property, as well as for its value in Sea Sickness (for which it is the best remedy known), it should be an indispensable article in every emigrant's outfit.

### TESTIMONIALS.

"Superior to every other I have tried."  
F. H. GREEN, M.R.C.S.  
Rochdale Dispensary.

"Peculiarly serviceable in Bronchitis, Spasmodic, and Neuralgic Affections."  
ALFRED ASPLAND, F.R.C.S.,  
Consulting Surgeon to Ashton Infirmary.

"I have used it largely in Spasmodic and Painful Affections, Bronchitis, and Neuralgia. It has the property of being readily combinable in ordinary prescriptions—an advantage over all similar preparations."—

R. TRAFFORD WHITEHEAD, M.R.C.S.

A Surgeon writes:—"In Diarrhoea, Colic, Ague, Spasms, I have found it relieve more pain and cause more joy than any other article that can be named. Has proved itself a specific against sickness."

Island Bridge, Dublin.

"I am pleased to say that although I have not finished a quarter of the bottle (2s. 9d.) the pain has left my chest, and the cough is almost well."—J. BROWN.

Immediately Relieves  
**COUGHS,  
CONSUMPTION,  
ASTHMA,  
BRONCHITIS,  
TIC,  
SPASMS,  
HYSTERIA,  
DIARRHŒA,  
DYSENTERY,  
CHOLERA,  
CRAMP, AGUE,  
Sea-Sickness, &c.**

## REVISED PRICE LIST.

	Retail.	Per doz
	s. d.	£ s. d.
Towle's Chlorodyne .. .. .	1 1½	0 8 6
Ditto .. .. .	2 9	1 3 0
Ditto (3 fluid oz.) .. .. .	4 6	1 16 0
Ditto (8 " ) .. .. .	11 0	4 13 0
Liq. Chlorodyni (Original and only Genuine) ½ lb.	2/6 each	
Ditto ditto ½ lb.	4/6 "	
Ditto ditto 1 lb.	8/- "	
Winchester Quarts (6 lb.) 7/6 per lb., bottles free.		
Towle's Antihillous Pills .. .. .	1 1½	0 8 6
Ditto .. .. .	2 9	1 3 0
Towle's Chlorodyne Lozenges } .. .. .	0 7½	0 5 6
Ditto Jujubes } .. .. .	1 1½	0 8 0
Ditto in bulk, bottles free, containing 1 lb., 2/9 each.		
Ditto ditto 1 lb. 10 oz., 4/6 "		
Ditto ditto 4 lb., 10/- "		
N.B.—The Commissioners will allow them to be sold by the retailers without further duty, provided they are simply wrapped in paper, and not enclosed in a box, bottle, or packet.		
Thornton's Celebrated Toilet Cream .. .. .	1 0	0 9 0
Ditto .. .. .	1 6	0 14 0
Ditto .. .. .	2 8	1 4 0
Amboline (Registered Trade Mark) .. .. .	2 6	1 4 0
The Thornton (Red) Lotion (Stamped) .. .. .	2 8	1 4 0
Thornton's Paragon Hair Wash .. .. .	1 0	0 9 0
Ditto .. .. .	2 6	1 4 0

Posters, Bills, and Showcards on application.

£5 worth (assorted or otherwise) Carriage Paid.

7 lb. Lozenges and upwards stamped with Chemists own name, free of charge.

A. P. TOWLE & SON.

75 BACK PICCADILLY,  
MANCHESTER.



# WYLEYS & CO.

## MANUFACTURING CHEMISTS

AND

## DRUG GRINDERS.

WAREHOUSES, LABORATORIES, AND DRUG MILLS,  
**COVENTRY.**

### COMPOUND SULPHUR PELLETS

ACCORDING TO THE FORMULA OF

**SIR ALFRED B. GARROD.**

One Pound contains 1,000 Pellets.

A Pound of ordinary Sulphur Lozenges will  
only give 460.

*Each Pellet contains Five Grains of Pure Sulphur  
and One Grain of Cream of Tartar.*

PRICE, in bulk, 2/6 per lb.; or put up in metallic  
boxes (20 pellets in each), with descriptive labels,  
2/- per dozen.

The above may also be had sweetened with Saccharine  
at 3/- per lb.

### GASTRIC ANTACID PELLETS,

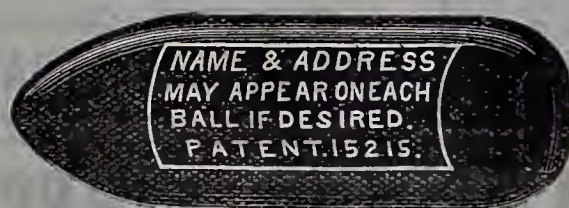
ACCORDING TO THE FORMULA OF

**SIR WILLIAM ROBERTS.**

PRICE, in bulk, 2/6 per lb.; or put up in metallic  
boxes (20 pellets in each), with descriptive labels,  
2/- per dozen.

### THE DURAPLASTIC COATED HORSE BALL.

(PATENTED.)



"The obvious superiority of these balls over the old paper-wrapped articles will impress the most stolidly conservative of farmers."—*The Chemist and Druggist*, October 27, 1888.

No. 4.—Alterative Balls	...	...	24/	per gross.
" 5.—Astringent Balls	...	...	24/	"
" 12.—Condition Balls	...	...	24/	"
" 6.—Cordial Balls	...	...	24/	"
" 7.—Cough Balls	...	...	24/	"
" 16.—Cough Balls	...	...	27/	"
" 17.—Cough Balls	...	...	27/	"
" 8.—Diuretic Balls	...	...	24/	"
" 9.—Fever Balls...	...	...	24/	"
" 1.—Physic Balls	...	...	24/	"
" 2.—Physic Balls	...	...	30/	"
" 3.—Physic Balls	...	...	36/	"
" 18.—Physic Balls	...	...	42/	"
" 19.—Physic Balls	...	...	48/	"
" 15.—Stimulating Balls	...	...	24/	"
" 10.—Tonic Balls...	...	...	24/	"
" 11.—Tonic Balls...	...	...	20/	"
" 13.—Worm Balls	...	...	30/	"
" 14.—Worm Balls	...	...	60/	"

#### PRIVATE FORMULÆ.

WYLEYS & CO. will be glad to prepare Patent Duraplastic  
Balls from private recipes.





# SIR JAMES MURRAY'S PURE FLUID MAGNESIA.

As Prepared by the Discoverer, SIR JAMES MURRAY, M.D.

**FOR OVER 60 YEARS IN USE AS AN EXCELLENT REMEDY FOR ALL DISEASES OF THE STOMACH AND LIVER.**

*In Summer time, and in warm climates, it is invaluable, as it cools the Blood and improves the system generally.*

It is the only known Drug which cures that most unpleasant of all maladies, viz., a HEADACHE. In cases of Gout and Indigestion it is indispensable.

**AND IN THE NURSERY IT IS INVALUABLE. SPOKEN OF MOST HIGHLY BY ALL THE PROFESSION.**

Sold by all respectable Chemists, in Large sized Bottles (the 1s. size containing nearly Double the Quantity usually sold at that price), at 1s., 2s. 6d., and 3s. 6d. each. Also in Winchester Quarts for Dispensary and Hospital use.

**CAUTION.**—Observe the SIGNATURE of the Inventor on EVERY LABEL.

**SIR JAMES MURRAY & SON, CHEMICAL WORKS, TEMPLE ST., DUBLIN.**

Wholesale Agents—BARCLAY & SONS, 95 Farringdon Street, London.



CHEMISTS' OWN NAMES AND ADDRESSES ON LABELS FREE OF CHARGE.

## LEADING LINES — LARGE PROFITS.

## GELATINE CAPSULES.

**FLEXIBLE, HARD, AND PERLES.**

We desire to call the attention of the Trade to our Goods, for which we claim the following distinct advantages:—**QUALITY.** The Capsules are beautifully formed, the membrane perfectly soluble, and the medicines used are first-class and of full weight, so that therapeutic activity can be relied upon.—**PRICE AND TERMS.** Our prices are low, we supply any quantity, and arrange, if necessary, to box the goods with labels printed with the Chemist's own name and address, free of charge. We shall be glad to execute a trial order, which, however small, will be sent post free, feeling assured that such will satisfy purchasers, and thus secure future commands.—**FOR SHIPPERS AND EXPORTERS.** We manufacture and supply Capsules which are specially designed to withstand extremes of temperature.

## COMPRESSED PELLETS

Our prices for Compressed Goods have now been materially REDUCED. We have installed improved and superior machinery, so as to enable us to produce a much better article than formerly. We supply the Pellets in bulk or in tin boxes for retail. The latter can be labelled with the Chemist's own name and address without extra charge.

**NOTE.**—We call particular attention to the New Remedies which we supply in this form, viz., ANTIPYRIN, SULPHONAL, PHENACETIN, CASCARA SAGRADA, &c.

**PRIVATE FORMULÆ.**—We fill Capsules and compress Drugs into Pellets, either from Customers' own private receipts, or with ingredients supplied by them.

## B. HOOPER & CO.

MANUFACTURING CHEMISTS,

43 KING WILLIAM STREET, LONDON, E.C.

COMPETITION IN PRICE AND QUALITY DEFIED.



# PRINTING & DOSING



## PILLS & GRANULES

OF

BY

**L. FRERE, 19 Rue Jacob, PARIS.**

Received the only Gold Medol given to Phormaceutical Products of the Paris Universal Exhibition, 1878.

 Also awarded at the International Exhibitions of  
**Gold** MELBOURNE, 1880; AMSTERDAM, 1883; SYDNEY, 1888; **Medals**  
 PARIS, 1889.


The names and weights of the active substances are printed very clearly on each pill or granule. The object of an easily read inscription, such as this, is to obviate those errors which may so easily occur in handling ordinary granules. The seriousness of such mistakes is a direct consequence of the action of the substances employed. The inscription gives every security both to the invalid and the doctor. The process of manufacturing printed pills and granules makes it possible to obtain absolute homogeneous masses, in which the active principles are uniformly distributed and mathematically dosed. The covering is of a nature which preserves the most changeable medicaments, such as iodide of iron, in all climates. All our various pills and granules are further distinguished by the colour of their covering. The printing is done by means of lampblack, and the colouring matter employed for the coverings is entirely of a vegetable nature.

### EXTRACT FROM PRICE LIST FRENCH PHARMACOPŒIA.

NAMES OF SUBSTANCES	Weights		Prices	NAMES OF SUBSTANCES	Weights		Prices	NAMES OF SUBSTANCES	Weights		Prices
	French Centigram	English Grains			French Centigram	English Grains			French Centigram	English Grains	
Amorphous Aconitina ..	1/2	1/120	8	Acetate of Morphia ..	1	1/6	1 3	Codeine .. .. .	1	1/6	1 8
Crystallised Aconitina ..	1/10	1/600	8	Solycylic Acid .. .. .	10	1 2/3	0 7	" .. .. .	2 1/2	5/12	2 0
Arsenate of Soda .. ..	1	1/60	6	Aloes .. .. .	10	1 2/3	0 7	" .. .. .	5	5/6	2 10
Arsenate of Strychnia ..	1/2	1/120	8	" " " " " " " " " "	—	—	0 6	Ergotina .. .. .	1	1/6	0 10
Bi-chloride of Hydrargyrom .. .. .	1	1/30	6	" " " " " " " " " "	—	—	0 6	" .. .. .	5	5/6	0 10
Bi-iodide of Hydrargyrom .. .. .	1	1/60	6	Benzoate of Lithina ..	1	1/6	0 8	" .. .. .	10	1 2/3	0 10
Colchicina .. .. .	1/2	1/120	8	Bromhydrate of Quinina ..	5	5/6	1 3	" .. .. .	15	2 1/2	0 10
Acetate of Morphia .. ..	1	1/60	7	" .. .. .	10	1 2/3	1 8	Extract of Belladonna ..	1	1/6	0 7
Hydrochlorate of Morphia ..	1	1/60	8	" .. .. .	15	2 1/2	2 0	Amorphous Quassina ..	1	1/6	0 8
Phosphoric Acid .. .. .	1	1/60	8	" .. .. .	20	3 1/3	2 6	" .. .. .	2	1/3	0 10
Phosphuret of Zinc .. ..	1	1/60	8	Bromide of Camphor ..	1	1/6	0 7	Santonino .. .. .	2	1/3	0 7
" .. .. .	2	1/30	8	" .. .. .	5	5/6	0 8	" .. .. .	5	5/6	0 8
" .. .. .	4	1/15	8	Caffeina .. .. .	1	1/6	1 3	" .. .. .	5	5/6	1 3
Picrotoxina .. .. .	1	1/60	8	Calomelas .. .. .	1	1/6	0 7	Solpote of Quinina ..	5	5/6	1 8
Crystallised Quassina ..	1	1/60	8	" .. .. .	5	5/6	0 7	" .. .. .	10	1 2/3	1 8
Extract of Strophanthus ..	1	1/60	10	Hydrochlorate of Quinina ..	5	5/6	1 3	" .. .. .	15	2 1/2	2 0
Solpate of Strychnia ..	1	1/60	8	" .. .. .	10	1 2/3	1 8	" .. .. .	20	3 1/3	2 5
				" .. .. .	15	2 1/2	2 0	Sulphate of Sparteioa ..	2 1/2	5/12	0 10

The preceding list comprises only a very small portion of the Pills and Granules prepared by the Firm of L. Frère. Their complete Catalogue contains the various formulæ of the French Pharmacopœia, also the leading ones of the British Pharmacopœia, as follows:—

BRITISH PHARMACOPŒIA			PRICES			BRITISH PHARMACOPŒIA			PRICES		
			Per Gross	Per lb.	Per Bottles of 50 pills				Per Gross	Per lb.	Per Bottles of 50 pills
Aloes Barb.	P. B. gr. iv.	.. .. .	s. d.	s. d.	d.	Ferri Carb.	P. B. or "Female Pill"	.. .. .	s. d.	s. d.	d.
Aloes and Ferri	P. B.	.. .. .	1 0	10 0	4	Blue Pill	P. B.	.. .. .	1 0	8 0	4
Aloes and Myrrh.	P. B.	.. .. .	1 7	12 0	6	Rhei Co.	P. B. or "Compound Rhubarb"	.. .. .	1 4	12 0	5 1/2
Asafœtida Co.	P. B.	.. .. .	1 4	10 4	5 1/2	Apericns	or "Antibilious Pill"	.. .. .	1 0	10 0	4
Calomel Co.	P. B. or "Calomel Pill"	.. .. .	1 2	10 0	5	Podophyllin	gr. 1/4 6,000 per lb.	.. .. .	1 2	20 0	5
Colocynth Co.	P. B. or "Colocynth Pill"	.. .. .	1 8	16 0	6 1/2	Acid. Arsenios	gr. 1/60	" .. .. .	1 0	10 0	4
Coloc. and Hyos.	P. B.	.. .. .	1 7	13 0	6	Atropia	gr. 1/60	" .. .. .	1 4	32 0	5
Ferri Iodid.	P. B. gr. iii.	.. .. .	1 8	16 0	6 1/2	Digitolin	gr. 1/60	" .. .. .	1 4	28 0	5

The above are the principal pills in daily use, and those P. B. are made in strict accordance with the formulæ of the British Pharmacopœia. In proportion with the demand, other kinds will be added to our list, at equally low prices.

NOTE.—Beyond the pills and granules mentioned in our price list, we manufacture to order any kind of pill or granule of which the formulæ may be confided to us, with whatever inscription the client may select. These special orders cannot be undertaken for a less quantity than two kilogrammes (4 lb. 7 oz.). It is also necessary to give (1) the colour selected for the covering, (2) the inscription written very distinctly. This lettering cannot occupy more than 18 European letters. The spaces between the words count as a letter. For the Hindoo languages the number of letters may vary according to the form of type. The price for manufacturing is 18 francs (14s. 4d.) per kilogramme (2 lb. 3 oz.) of pills covered. Our customers can have the raw materials sent to us by a wholesale drug house, or we will undertake to supply them. It is hardly necessary to add that an absolute discretion is guaranteed. The Granules comprise the doses of active principle for 1/2 milligramme, up to one centigramme exclusively. The Pills comprise all the other doses. Each bottle of Granules contains one hundred granules, viz.: 8 doz. 1/3. Each bottle of Pills contains fifty pills, viz.: 4 doz. 1/3.

A Complete Catalogue is forwarded Free on Application.



# BUNTER'S PREPARATIONS FOR THE TEETH

Are the PUREST, SAFEST, and BEST that can be used, containing nothing of a deleterious nature. They are strongly recommended by Drs. E. Smith, M.R.C.S., Prof. W. Wilson, M.D., Gordon Stables, M.D., R.N., Geo. H. Jones, D.D.S., F.R.S.L., F.R.M.S., &c., Andrew Wilson, M.D., F.R.S.E., &c., &c., J. Hounsell, F.R.C.S., and many others.

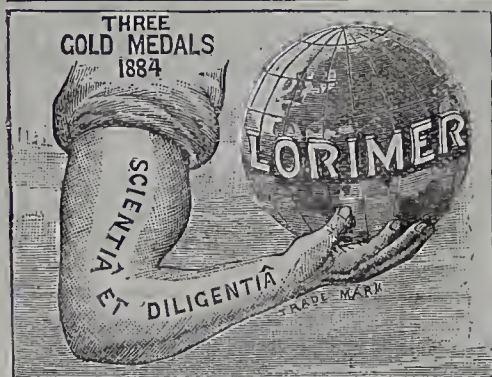
**BUNTER'S NERVINE FOR TOOTHACHE,** gives permanent relief by Painless constriction of the Nerve in Decayed Teeth, forms a Stopping, arrests Decay, saves Extraction, Sleepless Nights prevented, Neuralgic Headaches and all Nerve Pains relieved. As a NERVE TONIC it gives strength to the nervous system, invigorates the entire frame, affording relief and effecting a cure in many complaints over which the nerves exert control. Invented by G. B. BUNTER, Surgeon Dentist, Maidstone. Price 1s. 1½d. and 2s. 9d.

**PURILINE TOOTH WASH** for the TEETH, GUMS, and BREATH. A pure, perfect, and refreshing Fluid Dentifrice. A few drops in water used daily will thoroughly Cleanse, Beautify, and Preserve the Teeth, polish the Enamel, prevent Tartar, destroy all living "Animalculæ." It is Absolutely Pure and Harmless to the youngest child or most delicate constitution. Used as a Tooth Wash after each meal will keep the mouth in a delicious condition of comfort, health, purity, and sweetness, for ever. 1s. and 2s. 6d.

**BUNTER'S DENTINE,** a Permanent Stopping for Decayed Teeth. One can easily prepare and place it in the cavity of the Tooth in a soft state, and in a short time it becomes a perfectly hard and white Enamel, forming, as it were, a part of the original substance of the Tooth. Price 1s. 6d.

**PURILINE TOOTH POLISH,** a pure and perfect article for Cleansing the Teeth, Hardening the Gums, and Perfuming the Breath. Will Purify and Beautify the Teeth with a Pearly Whiteness, polish the Enamel, prevent Tartar, and destroy all living Germs (Animal or Vegetable), which are the most powerful source of decay to all Teeth. It is not a Powder or Soft Paste that will scatter over clothing and soil the toilet: it is a Dental Paste of stiff consistency, non-gritty, and Absolutely Pure and Harmless to use. It is neatly put up, forming a sightly Toilet Article, or may be carried in the pocket in any climate of the world, without injury or losing its virtues. Price 1s.

Proprietor—A. WILSON, 422 CLAPHAM ROAD, LONDON, S.W.



## LORIMER & CO.

MANUFACTURING CHEMISTS,

BRITANNIA ROW,

## ISLINGTON, N.

MANUFACTURERS OF

Citrate Magnesia, Scaled Preparations, Extract Malt, GOLD MEDAL Chemical Food, Syr. Hypoph. Co. Concentrated Waters 1 to 40, Fluid Extracts for Tinctures, &c., Pearl-coated Pills, Medicated Lozenges, &c., &c. Price Lists on application.

Established  
1843.

## THOMPSON & CAPPER,

Established  
1843.

## WHOLESALE & EXPORT HOMŒOPATHIC CHEMISTS,

55 BOLD STREET, LIVERPOOL,

And (late HENRY TURNER & CO.)

51 PICCADILLY, MANCHESTER.

ILLUSTRATED PRICE LIST ON APPLICATION.

## THOMPSON & CAPPER'S DENTIFRICE WATER.

Sells well everywhere, its beneficial qualities being attested to by physicians in all parts of the world. (See Testimonials.)

In 1s. 6d., 2s. 6d., 4s. 6d., and 8s. 6d. Bottles.

Wholesale Agents for the Dominion of Canada:—EVANS, SONS & MASON. Limited, MONTREAL.  
50



# Dr. J. COLLIS BROWNE'S CHLORODYNE.

THE ORIGINAL AND ONLY GENUINE.

## IMPORTANT CAUTIONS

From Lord Chancellor SELBORNE, Vice-Chancellor Sir W. PAGE WOOD,  
and the LORDS JUSTICES OF APPEAL.

VICE-CHANCELLOR SIR W. PAGE WOOD, by whom the suit in Chancery was first heard, stated in his judgment that 'Dr. J. Collis Browne was undoubtedly the Inventor of Chlorodyne, that the whole story of the Defendant Freeman was as deliberately untrue as the falsehood he had deposed to with reference to the use of his Chlorodyne in the Hospital.'

The VICE-CHANCELLOR also stated, 'that Chlorodyne was a fanciful name, and had application been made sooner, the Court would have given Dr. Browne protection.'

LORD CHANCELLOR SELBORNE coincided with the judgment of the Vice-Chancellor upon this point, and stated 'that had application been made at a proper time and place, the Court would have found means to restrain the Defendant from misrepresenting the decision of the Vice-Chancellor.'

LORD JUSTICE JAMES, on appeal, stated in his judgment, 'that the Defendant Freeman had made a deliberate misrepresentation of the decision of Vice-Chancellor Wood.'

It was proved in Court, on affidavit by Mrs. Forbes, of Paris, that the testimonial published in the *Times*, November 14th, 1865, speaking of the great efficacy of Chlorodyne in Cholera, referred to Dr. J. Collis Browne's Chlorodyne, and that she never used any other, that she had written to the Defendant Freeman to that effect; notwithstanding which notice the Defendant publishes the said testimonial as referring to his medicine.

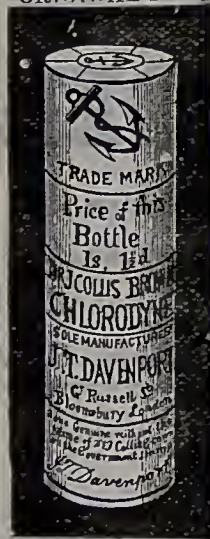
The Editor of the *Medical Times*, in his report on Chlorodyne, January 13th, 1866, gives information that the Chlorodyne referred to was the medicine introduced by a retired Army Medical Officer, which was Dr. J. Collis Browne; still this is published by the Defendant as testimony to his medicine.

Numerous affidavits from eminent Physicians and others were produced in Court, stating that Dr. J. Collis Browne was the Inventor of Chlorodyne, and that when prescribing they mean no other.

The Defendant himself publishes that his compound is in effect and composition quite different to any other preparation; nevertheless he assumes the name, testimonials, &c., of Chlorodyne.

Technicalities in law prevent that protection which the public should justly have against such a course of conduct. It is now incumbent on all who purchase Chlorodyne to see that the name, 'Dr. J. Collis Browne's Chlorodyne,' is engraved on the Government Stamp, as it is not sold otherwise. All other compounds under the name of Chlorodyne are spurious. All attempts at analysis have failed; hence the statement that the constituents of Chlorodyne are known is a misrepresentation.

ORIGINAL AND



ONLY GENUINE.

## FURTHER IMPORTANT NOTICE.

The subjoined list of eminent Firms concur with Vice-Chancellor Sir W. Page Wood's statement in Court, that Dr. Collis Browne was undoubtedly the Inventor of Chlorodyne; and that when Chlorodyne, or the Original Chlorodyne, is ordered, they invariably supply Dr. J. Collis Browne's:—

Apothecaries Hall,	London	Frazer & Green,	Glasgow	Morson, T., & Son,	London
Allen, Hanbury & Co.,	"	Gale & Co.,	London	Newbery & Sons,	London
Bals Brothers,	"	Giles & Son,	Clifton	Oldham, G., & Co.,	Dublin
Banks & Richards,	Birmingham	Goulding, Messrs,	Cork	Parsons & Richardson,	Leicester
Barron, Harvey & Co.,	London	Gratton & Co.,	Belfast	Peake, Allen & Co.,	Dublin
Bell, John, & Co.,	"	Grimwade, Ridley,	London	Raines & Co.,	York
Bourne & Taylor,	"	Grindley & Son,	Chester	Raines & Co.,	Edinburgh
Corbyn & Co.,	"	Hearon, Squire & Francis,	London	Sang & Barker,	"
Cox & Gould,	"	Hodgkinson, Tonge & Stead,	"	Sanger, J., & Sons,	London
Curling & Co.,	"	Hopkins & Williams,	"	Sim, James, & Co.,	Aberdeen
Curtis & Co.,	"	Hovenden, R., & Sons,	"	Smeeton, W.,	Leeds
Davy, M'Murdo & Co.,	"	Hunt & Co.,	Exeter	Southall & Co.,	Birmingham
Dobbin, W., & Co., Limited	Belfast	Hunt, A., & Co.,	"	Sutton, W., & Co.,	London
Drew, Barron & Co.,	London	Johnson, J. H. & S.,	Liverpool	Tomlinson, Hayward & Co.,	Lincoln
Drew, B., & Alexander,	"	Langton, W., & Co.,	London	Treacher, Hodgkinson & Co.,	London
Dunn & Company,	"	Lynch & Co.,	"	Westrup, J. B.,	Kensington
Edwards, W.,	"	Mander, Weaver,	Wolverhampton	Westwood & Hopkins,	London
Evans, Gadd & Co.,	Exeter	Marsden & Sons,	London	Woolley, James,	Manchester
Evans, Leecher & Webb,	London	Maw & Son,	"	Wyleys & Brown,	Coventry
Ferris & Co.,	Bristol	Meggeson & Co.,	"	Yates & Co.,	London
Foulger, S., & Son,	London	Mackay, John, & Co.,	Edinburgh		

After these public statements in a Court of Equity, and subsequent confirmation by the trade at large, no Chemist can conscientiously use or sell any other compound for Chlorodyne without committing a breach of faith, unjust to patient and physician. The value of the remedy alone creates the great demand.

Sold in Bottles—1s. 1½d., 2s. 9d., 4s. 6d., and 11s. Usual Discount to the Profession.

SOLE MANUFACTURER,

**J. T. DAVENPORT, Pharmacist,**

83 GREAT RUSSELL STREET, BLOOMSBURY SQUARE, LONDON



Address for Telegrams, "BOLLAND LONDON."



Established upwards of a Century.

# HODGKINSONS, TREACHER & CLARKE

WHOLESALE AND EXPORT DRUGGISTS

198 UPPER WHITECROSS STREET LONDON E.C.

ESSENTIAL OILS PEARL COATED PILLS CHEMICALS TINCTURES IN BOND  
 Manufacturers of Pharmaceutical Preparations  
 PRICE CURRENT AND TERMS ON APPLICATION

## NITROGLYCERINE TABLETS

Tabellæ Nitroglycerini, B.P. 1885 (Martindale).

By authority of the Medical Council, the compilers of the British Pharmacopœia have adopted and made OFFICIAL Nitroglycerine Tablets, as Manufactured by W. M. during the last ten years.

The Nitroglycerine is in a perfectly fixed solution in Chocolate. The Tablets are palatable, and weigh ONLY 2½ grains each. They are sold at the following prices:—

In Boxes, Retail ... .. 2s. 6d. and 4s. 6d. each.

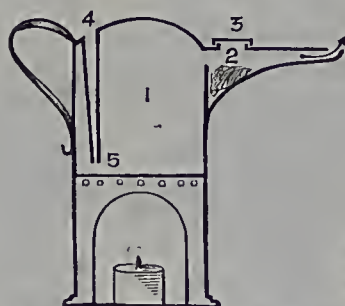
For export to hot climates, corresponding quantities are supplied in bottles.

For Hospitals and Dispensing, in Bottles, 2 oz., 4 oz., 8 oz., and 16 oz. in each

Also CAPSULES OF IODIDE OF ETHYL, covered with Silk, 8 in a Box, Retail, 2s. 6d.  
 " " NITRITE OF AMYL, " " 12 " " 2s. 6d.

W. MARTINDALE, PHARM. CHEMIST, 10 New Cavendish St., Portland Place, W.

## INFLUENZA.



### USE "PINEOTAS" OIL

FOR INHALATION OR FUMIGATION.

In large Bottles, 6/6 per dozen, or 10/- per gallon.

HAMILTON'S FUMIGATOR AND INHALER,

For use with PINEOTAS OIL, is the most handy and complete article in the market, now selling rapidly, price 16/- per dozen complete. The steam passes through the reservoir (2) containing the disinfectant, instead of being mixed with the water, as is usually the case.

HAMILTON &amp; CO., HIGH STREET, WANDSWORTH, LONDON, S.W.

## DR. SOULE'S HOP BITTERS.

### NOTICE TO THE TRADE.

The HOP BITTERS CO., Ltd., upon reconstruction, in consequence of the numerous imitations of their world-famed medicine, have deemed it desirable to bring the name of the Originator of these celebrated Hop Bitters (Dr. Soule's) more prominently to the notice of the public, in order to prevent future impositions. They have therefore altered their advertisements accordingly, of which you will please take notice.

The irritation which unfortunately existed during the period of the late administration will effectually be removed by the present management, and the amicable relations with the Trade which formerly existed will, it is hoped, be in future maintained.

41 FARRINGDON ROAD, LONDON, E.C.



# ARMBRECHT COCA WINE

(ERYTHROXYLON COCA).

FOR FATIGUE OF MIND AND BODY.

A NEW RESTORATIVE TONIC

OF

VOCAL, MENTAL, AND PHYSICAL POWERS.

Particularly useful in Hot and Enervating Climates.

Trade Discount,  
25 per cent.

June 28<sup>th</sup> 1887  
25 New Walk Terrace York  
Dear Sir I have been delighted with the  
samples of Coca Wine which you have sent me.  
There is a minute amount which is destroyed by the  
heat of summer & which recovers on the application of a  
drop of water. Ambrecht's Coca Wine has a similar  
effect in reviving & restoring the exhausted energies of  
the human economy & its sustaining & strengthening  
powers are marvellous.  
Yours &c. Allen  
Lecturer on Anatomy & Physiology  
at the City of York School of Medicine.

Trade Discount,  
25 per cent.

THE RETAIL PRICE OF THIS WINE IS

4s. 6d. per Bottle, or 48s. per Dozen Box.

For sleeplessness this Wine is almost always successful, and superior to Opiales,  
Chloral, and Bromides, &c., as it produces no reaction.

ARMBRECHT, NELSON & CO., 2 Duke Street, Grosvenor Square.



**TOWLE'S**  
**PENNY ROYAL & STEEL MILLS**  
 TRADE MARK  
**PRICE 4/6**



# DR. JOHN HOOPER'S PILLS.

Telegraphic Address—"FEEDING BOTTLES LONDON."

# PENNY QUININE.

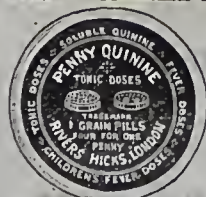
## QUININE PILLS.

## INFLUENZA PILLS.

**Four (Tonic) Doses for One Penny.**

**One (Fever) Dose for One Penny.**

## Four Pennyworth in a Metal Box.



84



# OPPENHEIMER'S CREAM OF MALT

(REGISTERED),  
WITH COD-LIVER OIL,  
AND THE  
HYPOPHOSPHITES OF LIME, POTASH, AND SODA.

*Can be obtained from all Wholesale Houses, or direct from the Sole Manufacturers,*

**OPPENHEIMER BROS. & CO.,** Manufacturing Chemists,  
1 & 3 SUN STREET, FINSBURY SQUARE, LONDON, E.C.

## CHEMISTS WHO HAVE FAILED

To find a suitable Malt Extract should give Loefflund's a trial. It neither ferments nor crystallises, and is absolutely pure.  
In 2 cwt. casks, 28 lb. tins, 7 lb. tins. Also Malt Extract and Cod Liver Oil in Bulk.

**LOEFLUND'S  
KINDERMILCH & ALPINE MILK BISCUITS (POWDERED) (INFANT'S FOODS)**

Are prescribed by the leading specialists in diseases of children.

**LOEFLUND'S CREAM EMULSION (Cremor Hordeatus)**

Is invaluable to those who cannot assimilate Cod Liver Oil.

Sole Agents—**ROBERT BAELEZ & CO.,** 14-20 ST. MARY AXE, E.C.

**LOFTHOUSE & SALTMER,  
MANUFACTURING CHEMISTS, WHOLESALE & EXPORT DRUG MERCHANTS  
HULL,**

Manufacturers of all Pharmaceutical Preparations on the best and most improved principles.  
QUOTATIONS ON APPLICATION.

**SOLUT. ÆTHERIS NITROSI (Æther. Hyponit.)**

1 part to 5 Sp. Vini Rect. 58 o.p. makes Sp. Æth. Nit. 850.  
This concentrated preparation, carefully drawn in our own laboratory, is highly recommended, and daily finding increased favour with the trade for making Sp. Nitre, as required for use, thus avoiding the risk of loss of Nitrous Æther, and the development of free acid, both of which are almost certain to occur in Sp. Nitre which has been some time drawn.

Price in 1-lb. Bottles, 3s. per lb.; in Winchester Quarts, 2s. 10d. per lb., net.

Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas: Fruit Essences; Carmine Aniline Dyes; Bees Wax, &c., &c. Applications for Special Quotations invited.

**DUNCAN, FLOCKHART & CO.,**  
WHOLESALE AND EXPORT DRUGGISTS, EDINBURGH.

**CHLOROFORM,**

Prepared from Pure and Methylated Spirit.

Put up in all sizes of bottles. A strap with Name and Trade Mark of the Firm is placed over the stopper of each bottle. For Export, in bottles corked and luted (stoppers attached), and in hermetically sealed flasks when required.

*N.B.—We guarantee our Chloroform prepared from METHYLATED SPIRIT to be PURE CHLOROFORM, answering all the tests of the British Pharmacopœia.*

**CASCARA SAGRADA CAPSULES,**

In Boxes, at 1/6 and 2/6. 14/- and 24/- per dozen.

Each Capsule equal to half a teaspoonful of Fluid Extract of Cascara Sagrada. The chief drawback to the use of this valuable drug, its unpleasant bitterness, is obviated when taken enclosed in Capsules.



All  
Wholesale  
Houses.

# PETER MÖLLER'S

43  
SNOW HILL  
E.C.

LONDON, CHRISTIANIA, STAMSUND, AND SYLTEFJORD.

## G. F. COWARD & CO., WHOLESALE DRUGGISTS & PERFUMERS,

PRIZE MEDAL FOR  
SEIDLITZ POWDERS.

20 (late 51) LITTLE BRITAIN, LONDON, E.C.

PRIZE MEDAL FOR  
ESSENCES.

### PRIZE MEDAL IMPROVED SEIDLITZ POWDERS.



Improved Soda Water and Ginger Beer Powders. Genuine Medicines in Stoppered Bottles. Essence of Jamaica Ginger, Chamomile and Ginger, and Peppermint. Celebrated Jamaica Pomatum in Fancy Pots.

Special Quotations to Export Merchants and Shippers. Price Lists free on application.



Fox's "PALATABLE" CASTOR OIL, 6d., 1/. In use 20 years.  
Both Medicines will stand any Climate. Terms unaltered, and specially liberal to Shippers. Consigned to Agents unstamped

#### NORTH MEDICINE CO.

Spring Street, MANCHESTER;  
95 Farringdon Street, LONDON;  
SHARLAND & CO., Lorne Street,  
AUCKLAND, N.Z.

## INDIAN ARMY MEDICAL STAFF, Dr. Waring, Chief.

His formula for Fox's "KIDNEY AND BLOOD MEDICINE" is one of the best Blood Medicines known, and has been largely used for last 30 years. Half-pint bottles, 2/6. Send trial order. Fox's "PALATABLE" CASTOR OIL is recommended by all the leading Physicians in England. See their opinions. Dr. Garrett Horder, National Sanatorium, says, "It is particularly recommended for children and delicate females, and owing to its really pleasant taste is very easily administered." Patients can take it when all other kinds are rejected.



### CIE de FABRICATION FRANÇAISE du NICKEL, 64 Rue de Turenne, PARIS

(FRENCH NICKEL MANUFACTURING CO.).

Speciality: Laboratory, Chemistry, and Surgical Articles in Pure Nickel Guaranteed.



Anodes, rolled and cast, in Pure Nickel, guaranteed.  
Sulphates of Nickel, simple and double.  
Apparatus for Chemical Manufacturers constructed according to design.



Household, Culinary, Table, and Toilet Articles in Pure Nickel, solid or plated.

For further particulars see Special Price List, which will be forwarded free on application when business card is enclosed.

S. A. EDWARDS & CO., BIRMINGHAM,  
Agents for England.

### The Mormon Elder's

## DAMIANA WAFERS

THE MOST POWERFUL  
INVIGORANT  
EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY. Prompt, safe, and Sure.  
4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

F. B. CROUCH,

202 Grand Street, New York City  
London Depot, 51 Strand, W.C.

Hovenden & Son, Sanger & Son,  
Barclay & Sons, Edwards & Son, and  
all Wholesale Druggists.



### 10. PILLS!! SUGAR-COATED! 10. PILLS!!



Medicine made pleasant for all.  
The Cheapest and Best Family Medicine. The most Saleable Article in the Market. Composed of the purest Drugs. Will keep good in all Climates any length of time.

The following varieties are put up in Glass Tubes, on Cards of 3 doz., or in gross boxes, at one penny per tube:—

Antibilious	Hamilton
Asafoetida	Liver
Blaud	Podophyllin
Castor Oil	Quinine
Colocynth	Rhubarb
Dandelion	Tonic
Female	Vegetable, &c.

Other varieties can be had if required. Terms—8s. per Gross, cash; 6 Gross assorted, in handsome mahogany glass case for 48s. Sent free by parcel post on receipt of P. O. Order or Postage Stamp. Agents and Purchasers of large quantities get a liberal discount.

Aromatic Cachous, Chlorate of Potash Pellets and other varieties, put up as above at same price.

AGENTS WANTED.—APPLY AT THE

Anderston Apothecaries Hall, Washington St., GLASGOW.

## DENOVAL'S MEDICINAL CAPSULES

ARE THE BEST AND CHEAPEST.

Attention is called to the following articles:—

ON THESE  
**MEDICINAL  
CAPSULES**

CHEMISTS ARE  
ALLOWED

A LARGE PROFIT.

	Retail
Pernian Mixture Capsules	8/ & 2
Matteo Oil and Capsulae de	2/6
Santal Oil do. (38 in each box)	4/
Onch Oil and Capsulae do.	2/6
Capsulae, Cube Oil, and Santal Oil do.	8/6
Capsulae Capsules, No. 0	1/6
" " No. 1	1/8
" " No. 2	1/
Capsulae, Alum and Cubebe	1/6
Compound Ferruginous	1/6
Male Fern Oil	8/
Cod Liver Oil	1/6
Castor Oil	1/8
Denoual's Injection (to insure a radical cure)	2/9

ALL DRUGS WARRANTED TO BE GENUINE

### JULES DENOVAL,

Carlton House, 4 New Cross Road, London, S.E.

## EADE'S

CELEBRATED

# GOUT

AND RHEUMATIC

# PILLS.

### THE SAFEST and MOST EFFECTUAL CURE for

Gout,  
Rheumatism,  
Rheumatic Gout,  
Lumbago,  
Pains in the Head,  
Face, and Limbs, &c.

They require neither confinement nor alteration of diet, and in no case can their effect be injurious.

Prepared only by GEORGE EADE, 72 Goswell Road, London, and sold by all Chemists, in bottles, 1s. 1½d.; three in one, 2s. 9d.



# BARRON, HARVEYS & CO.

## GILTSPUR STREET, LONDON, E.C.

Beg to inform their friends and the Trade generally that, having purchased the Business of

### BARRON, SQUIRE & CO., BUSH LANE,

and also the various Formulæ of the Special Preparations of

### JAMES BASS & SONS, HATTON GARDEN,

they are prepared to execute orders for the same, and pledge themselves to supply them in all their integrity.

*Specimens of these Preparations have remained in the Museum of Kew Gardens during 23 years without deterioration.*

### ALFRED WHITE & SONS, LATE T. R. & A. WHITE, MANUFACTURING CHEMISTS.

Manufacturers of Acids, Æthers, Sp. Æther. Nit., Sp. Ammon. Arom., Liq. Ammon., Soldering Solution, &c., and preparations of Alum, Animal Charcoal, Antimony, Baryta, Bismuth, Strontia, Zinc, &c.

### CASTLE STREET, SAFFRON HILL, E.C.

Works:—WEST DRAYTON, MIDDLESEX. Telegraphic Address:—"ETHER METHYLATED LONDON."

## "SPECIALITIES" OF WIDE REPUTATION

Suitably Packed for Home and Export, in various Languages, for all Markets.

<p><b>'COAGULINE'</b> The Best Cement for all Broken Articles.</p> <p><b>LINSEED,</b> Chloro.-Linseed and Throat Lozenges, Jujubea, &amp;c.</p> <p><b>CUE CEMENT,</b> Cue Tips, Wafers, FIXERS, CHALKS, &amp;c.</p>	<p><b>'LAVA' CEMENT.</b> A fusible imperishable Patent Glass Valve For Feeding Bottles.</p> <p><b>ABSORBENT COTTON WOOL.</b></p>	<p><b>COMPOUND ESSENCE OF LINSEED,</b> Aniseed, Senega, Squill, Tolu, &amp;c.</p> <p><b>THE STOCKPORT FOR REMEDY FOR COUGHS AND COLDS.</b></p>	<p><b>OXMYEL SCILLÆ</b> (exceptionally brilliant) Dec. Senega Co. Conct.</p> <p><b>PROPHOSACCHARITE.</b></p> <p><b>GLYCERLINE.</b> Linum Glycerinum.</p>	<p><b>'SAPO-LINI'</b> (Saponified Linseed Jelly).</p> <p><b>EMOLLIENT</b> For Chapped Hands, &amp;c.</p> <p><b>ELASTIC STOCKINGS, KNEE CAPS, SOCKS, ETC.</b></p> <p><b>MERRICK'S PATENT BELTS,</b> For Abdomen, Back, &amp;c.</p> <p><b>TOILET SOAP.</b></p>	<p><b>CHEMICAL DISINFECTANT.</b></p> <p><b>BIRD LIME.</b></p> <p><b>TIC PILLS,</b> LINUM CATHARTICUM PILLS, Aspidiate PILLS, &amp;c.</p> <p><b>GUN COVER and CARRIER, "THERMONE,"</b> or HEAT RADIATOR.</p>
---	--	--	--	--	---

Prices. Circulars with Name and Address, Specimens, Show Cards, Glass Tablets, &c., &c., on application.

**KAY BROTHERS LIMITED,** Laboratory and Works, ST. PETERSGATE MILLS, STOCKPORT, Founded A.D. 1788. Incorporated 1887.

## THE AUGEAN FLUID (Registered)

A Safe, Efficient, and Cheap DISINFECTANT and ANTISEPTIC PREPARATION for general use, an improvement on Carbolic Acid and similar products, as it is not corrosive, and emulsifies with water in any proportion.

SPECIALLY RECOMMENDED BY A. J. SEWELL, Esq., M.R.C.V.S., FOR WASHING DOGS.

Sold in bottles at 6d., 1s., and 1s. 9d., and in 1-gallon tins, 5s.

## THE AUGEAN DOG SOAP (Registered)

An excellent Soap for Washing Dogs. It cleanses the skin, destroys fleas and other parasites, and keeps the dog in a healthy condition.

Sold in boxes containing 3 Tablets, Price One Shilling per box.

DRUGS, CHEMICALS, & PHARMACEUTICAL PREPARATIONS  
PRICE LISTS ON APPLICATION.

Sole Proprietors—**WILLOWS, FRANCIS & BUTLER,**

ESTABLISHED 1751.

Wholesale and Export Druggists,

**WHITE HORSE BUILDINGS, 101 HIGH HOLBORN, LONDON, W.C.**





# SHARLAND & CO.

ESTABLISHED 1870.

WHOLESALE DRUGGISTS AND MANUFACTURING CHEMISTS,  
LORNE, COBURG, AND VICTORIA STREETS, AUCKLAND, N.Z.,  
Lambton Quay, Wellington, and  
**119 & 120 LONDON WALL, E.C.**

Buying Agencies undertaken on the best terms. Special Rates to Wholesale Houses.  
References given and required. Samples and Quotations solicited.

## PURE CARBONATE OF LITHIA

and all other Lithia Salts.

## MERCURIALS

Calomel, Corrosive Sublimate, Oxides, &amp;c.

## IODOFORM

Chloral, Terpene, Osmic Acid, Tannin, Tartar Emetic.

LIQUID CHLORIDE OF METHYL, for the treatment  
of Rheumatism, Neuralgia, &c.

GRAND PRIX, PARIS EXHIBITION, 1889.

Wholesale from **FUERST BROS.**, 4 Copthall Buildings, London, E.C.Sole Agents for **BILLAULT**, Rue Sorbonne, PARIS.

N.B.—Stock of the above kept in London.

Telegrams, "Fuerst," London.

Telephone No. 462.

## DURBAN, NATAL. THE NATAL DRUG CO., LD.

(Late Bentley &amp; Vanderpump),

WHOLESALE DRUGGISTS,  
IMPORTERS, AND MANUFACTURING CHEMISTS.

AGENCIES undertaken for the Sale of  
PROPRIETARY ARTICLES, and other Goods suited to the  
SOUTH AFRICAN MARKETS.

LONDON AGENTS:

DAVIS &amp; SOPER, Bury Street, St. Mary-Axe, LONDON.

Telegraphic Address—"REPOSNO LONDON."

## DURBAN, NATAL.

## FOREIGN SPECIALITIES & MEDICINES.

REVISED PRICE LIST.

# ROBERTS & CO.

FOREIGN AND ENGLISH CHEMISTS,  
WHOLESALE, IMPORT, AND EXPORT AGENTS FOR  
FOREIGN MEDICINES AND PATENTS,  
76 NEW BOND STREET, LONDON.

Messrs. Roberts & Co. beg to inform the Trade that they are Agents for all the principal French and Foreign Specialities and Medicines, a large supply of which they have always on hand, and can supply on very favourable terms. They are in daily communication with their Paris House, and can offer exceptional facilities for procuring New Medicines, &c., &c., with very little delay. The following is a list of a few that they name *au hasard*, any that have a large sale:—

Retail	Per doz.	Retail	Per doz.	Retail	Per doz.	Retail	Per doz.
4/6.. Alool de Menthe Ricqles	41/5	4/6.. Capsules Matico	36/	2/3.. Gnyot's Goudron	18/	7/0.. Rabuteau's Elixir Ferrug.	65/
2/9.. Ditto	21/8	4/6.. " Raquin	36/	11/.. Laville's Gout Tincture	91/10	2/9.. " Sirop	24/4
2/9.. Anbergier's Syrup	26/3	4/6.. " Mathey Caylus	27/	11/.. " Pills	91/10	4/0.. Racahout	31/
2/9.. " Pâte	15/4	4/6.. Chassaigne's Wine	38/9	2/3.. Papier Fayard	13/6	4/6.. Reynal's Bongies	37/10
6/8.. Bay Rum	57/	2/9.. " Pills	24/4	1/1 1/2.. Ditto	7/3	2/9.. Ricord's Injection	24/4
6/8.. Ditto	31/	4/6.. Olin's Bromide Cam. Dragées	45/	4/.. Papier Fruneau	24/4	4/6.. " Capsules	38/
2/.. Belloc's Charcoal	15/4	5/.. Eau Botot (Genuine)	40/1	2/3.. Ditto	14/5	9/.. " Syrup	90/; 4/6; 42/
1/9.. " Lozenges	14/5	3/.. Ditto	24/4	1/9.. Pâte Anbergier	15/4	1/8.. Star Paper	11/
4/6.. Blanchard's Pills	32/5	2/6.. Esplo's Cigarettes	13/6	1/9.. " do Berthé	15/4	2/9.. Vallet's Pills	22/6
2/6.. Ditto	18/	6/.. Elixir de Coca	56/9	2/9.. " de Coca	24/4	1/9.. Ditto	14/5
8/.. Bron's Injection	27/	2/9.. Flon's Syrup	22/6	1/9.. " de George	14/5	4/6.. Veloutine (White, Pink, Yellow)	37/1
8/.. Bugeand's Wine	36/	2/.. Gayetty's Paper	15/4	1/1 1/2.. Ditto	9/	3/6.. Ditto	27/
4/.. Bully's Vinegar	32/5	2/3.. Granules Arsen. Acid	13/6	1/6.. " de Nafé	13/6	2/9.. Vichot's Trochisques	21/8
2/.. Ditto	16/3	2/9.. " Iron	14/5	1/9.. " Regnaud	14/5	4/6.. Valentine's Meat Juice	38/
4/6.. Candé's (Lait Antéphillic)	39/8	2/9.. " Soda	15/4	7/.. Pierlot's Valerian	69/5	4/6.. Vin de Coca Mariani	39/8
4/6.. Capsules Bromide Camph.	45/	2/9.. Grimault's Syrup Lime	23/5	2/9.. Rabuteau's Drgées Ferrug.	24/4		

Special Quotations in large quantities.

*MM. Roberts & Co. ont l'honneur d'informer MM. les Pharmaciens Spécialistes de France et de l'Etranger qu'ils se mettent à leur disposition pour des dépôts qu'ils voudraient établir à Londres. On peut avoir tous renseignements en s'adressant à leur maison de Londres ou à Paris.*

SPECIAL AGENTS FOR MARIAN'S ELIXIR, EXTRACT PATE, PILLS, SYRUP AND WINE OF COCA, AND FOR VALENTINE'S MEAT JUICE  
AND LE GRAND'S ORIZA PERFUMERY.

Established

58

House in Paris: **ROBERTS & CO.**, Rue de la Paix 5.

[1823]



**SPECIAL****INDIARUBBER  
POROUS PLAISTERS.****STRENGTHENING, BELLADONNA,  
AND CAPSICUM.**

Manufactured by

**WILLIAM MATHER.**

Chemists are respectfully informed that by purchasing one gross of any of the above their own Names and Addresses may be printed upon the wrapper and back cloth of each plaister.

PRICE, INCLUSIVE OF PRINTING, **24/-** PER GROSS.

Subject to usual Discount, as per Price List.

**W. MATHER.**

MANUFACTORY:—

**DYER STREET, HULME, MANCHESTER.**

London Wholesale and Export Agents:—Messrs. MACE & HALDANE, 94 Milton Street, LONDON, E.C.





## COMFORT FOR THE FEET.

Corns and Bunions may be removed, and enlarged Toe Joints reduced, by using *Thompson's New French Corn Plaster*. Sole Proprietor, M. F. THOMPSON, Homoeopathic Chemist, 17 GORDON STREET, GLASGOW, from whom the Plaster may be had in Packets, by post, for fourteen stamps. Those who are troubled with the discomfort of Corns or Bunions will be glad to have attention called to this remedy, as it removes pain very speedily. It is a simple Plaster, thin as silk, and comfortable to the foot.

Ask your Chemist for it, and take no Substitute.

Wholesale 9/6 per dozen, cash with order, post free.  
May also be obtained through London Wholesale Houses.

Walking is now really a pleasure to me.

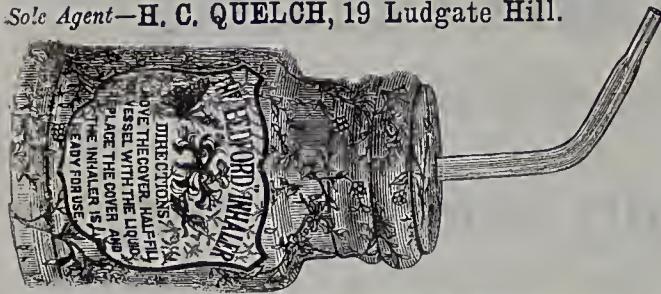
It is put up on Cards. "Very saleable."

## THE "BEDFORD" INHALER

IS BEING PRAISED EVERYWHERE.

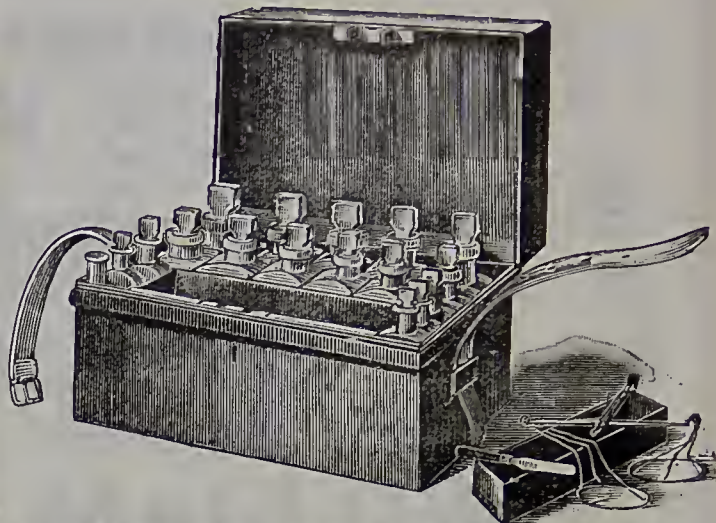
THE CHEMIST AND DRUGGIST says:—"The manipulation of the 'Bedford' Inhaler is simplicity itself." Price to the Trade, 15/ per doz. In ordering be sure and mention the "BEDFORD."

Sole Agent—H. C. QUELCH, 19 Ludgate Hill.



## BENTLEY'S COLONIAL MEDICINE CHEST

TO SUIT ALL CLIMATES.



The above is made in Black Japanned Tin, size 10x6½x5½, fitted with Lock, Key, and Strap; contains 5 4-oz., 6 2-oz., and 5 ½-oz. stoppered bottles, Scales, Knife, and Measure, space for Plaster, &c.

Price 16/6 each.

## E. BENTLEY & SON,

Wholesale and Export Druggists' Sundriesmen and Medicine Chest Manufacturers,

14 TABERNACLE STREET, LONDON, E.C.

## ESCHMANN BROS. & WALSH,

Inventors and Manufacturers of the

## SOFT SILK FLEXIBLE CATHETER,

GUARANTEED WITH WOVEN EYES.



To be had of all Surgical Instrument Makers and Wholesale Houses.

## THE SURGEONS' LINT,

V.B. QUALITY.

The superior quality of Newsome's Absorbent Surgeons' Lint is universally admitted. The V.B. quality is quite pure and of great superficial area and exquisite softness. The O., D., E., and F. qualities are equally pure and absorbent; E. is stronger in fabric.

NEWSOME'S BLEACHED ROLLED BANDAGES, 3 in., 2½ in., 2 in. Also SURGICAL ABSORBENT OPEN BANDAGES.

Specially Bleached & Grey Carded Cotton Wools, Absorbent & Bleached & Grey Waddings; also Sheet Waddings, Tow, &c.

THE TRADE SUPPLIED THROUGH THE LONDON AND PROVINCIAL WHOLESALE HOUSES, OR FROM

**C. NEWSOME,** Spinner and Manufacturer, JERSEY ST. MILLS, ANCOATS, MANCHESTER.

London Agents—B. PRATT & CO., 1 Wood Street, E.C.

Telegraphic Address—"Newsome, Ancoats," Manchester.

POMIES'  
OPHTHALMIC  
POWDERS  
AND  
MEDICINES.



OPHTHALMIC  
INSTITUTION &  
LABORATORY,  
32

EUSTON SQUARE  
LONDON, N.W.

## POMIES' OPHTHALMIC POWDER AND MEDICINES.

For the rapid cure of diseases  
of the Eye without operation.

ALL CHEMISTS SHOULD KEEP IT.

PRICE LIST SENT ON DEMAND.

New method of curing diseases of the Eye  
without operation, by E. POMIES, Oculist,  
late Surgeon in the French Army, &c., sent on  
demand to all Chemists for distribution.

Sold by Wholesale Agents in London.

## VINCENT WOOD,

29, 30, 31 PATERNOSTER SQ.; 10, 11, 12, 13 ROSE ST.,  
LONDON, E.C.

DEPOTS AT PARIS, NEW YORK,  
AND BRUSSELS.

Factories at  
STRATFORD; ROSE ST; NOTTINGHAM

Telegraphic Address—"ACME LONDON."  
Registered Trade Mark—"EUREKA."

Bona-fide Manufacturer of Trusses,  
Elastic Hosiery, Abdominal Belts,  
the Eureka Medicated Pine Wool  
Felt Appliances, Obstetric Binders,  
Chest Expanding Braces, Suspensory  
Bandages, &c., &c.



Any difficulty in procuring the "Eureka" Brand of goods from your  
Wholesale Houses, apply direct for name of nearest Agent.  
ESTABLISHED 1840.



FOR LOW PRICES OF INHALERS,

RESPIRATORS, ETC.



No. 785



No. 787



No. 789

SEE NEW ILLUSTRATED PRICE LIST  
OF  
F. SCHUTZE & CO., 36a ALDERSGATE ST., E.C.

**LINT.****GANGEE TISSUE.**(PATENT ABSORBENT GAUZE AND  
COTTON WOOL.)**ABSORBENT  
COTTON WOOL.**

ROLL BANDAGES.

**ROBINSON & SONS,**

COTTON SPINNERS AND MANUFACTURERS OF

**SURGEONS' LINTS, COTTON WOOLS,  
AND BANDAGES,****WHEAT BRIDGE MILLS,  
NEAR CHESTERFIELD.**

Depot—55 Fann Street, Aldersgate Street, London.



TRADE MARK.

**WINTER GOODS.**

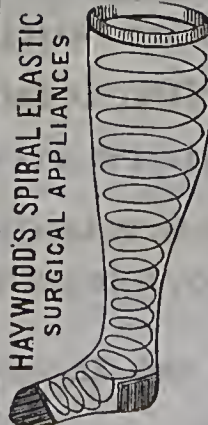
Before ordering Chest Protectors, &amp;c., write for sample of

**HAYWOOD'S PATENT VENTILATING,***The only Chest Protector made on scientific principles.*Manufactured from Pure Natural, Scarlet, and Medicated Pine Wool.  
Made also in Vests, Drawers, Combinations, Chest and Back Pro-  
tectors, Bodices, Waistcoats, Sleeping Socks, Gout Gloves, &c.

Show Stand sent gratis with orders for not less than One Dozen.

Chest Protectors and other Appliances for winter made also in  
Chamois Skins, Knitted Wool, Fleecy, Felt, Medicated Pine, &c.**MAGNETIC  
BELTS,**

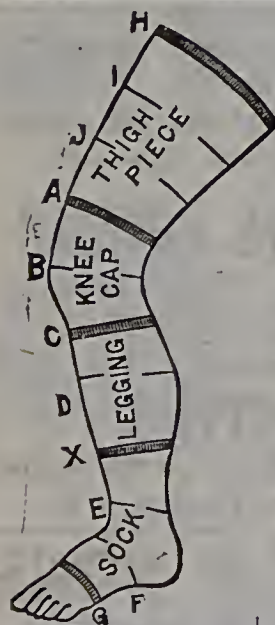
Chest &amp; Back Protectors, &amp; Socks.

**CHILBLAIN SOCKS.**Fleecy Sleeping Socks and Knee Caps, Patent Pile  
Surgical Elastic Knee Caps, Socks, and Stockings.**PATENT SEAMLESS, PATENT PILE,**and other Elastic Surgical Stockings, &c.,  
in Thread Silk, Cashmere, Scarlet, Pine, and  
Natural Wool.

PATENT 4633 (Seamless.)

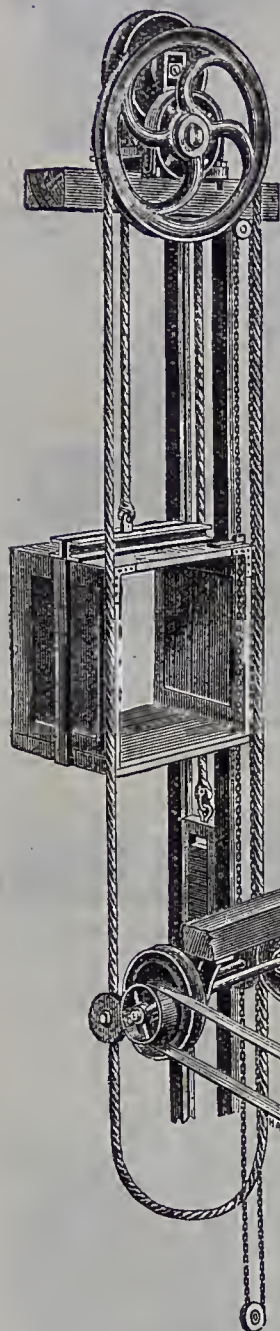


PATENT.

Hot Water Bottles and Covers. Respirators, Inhalers, Bronchitis Kettles, Throat Sprays,  
Waterproof Coats, Cloaks and Driving Aprons, Footballs, Shin Guards, and Athletic Appli-  
ances, Belts, Chest Expanding Braces, Trusses, Suspensory and other Bandages, Druggists'  
 Sundries, Invalid and Nursery Appliances, &c.**J. H. HAYWOOD, CASTLE GATE. NOTTINGHAM.**Patent Pile, Protected,  
14,618. The Pile lying  
over the Indiarubber  
Cords, protecting them  
and forming a smooth soft  
surface to the limb.



# A. ATTWOOD & CO.



ARE BONA-FIDE  
MANUFACTURERS OF

## LIFTS AND HOISTS.

WORKING BY  
Gas-Engine,  
Steam-Engine,  
Hydraulic, or Hand  
Power.

FOR  
Passengers,  
Goods,  
Luggage,  
Dinners, &c.

Thorough  
Efficiency  
Guaranteed.

CONTRACTORS TO H.M. WAR OFFICE  
AND COLONIAL GOVERNMENTS.

Canal Head Foundry and Engineering  
Works,

### ULVERSTON.

London Office. — 3 GRACECHURCH ST., E.C.  
62

## STOKES' PATENT CHECK TILL SYSTEM

HAS  
SIX ADVANTAGES  
UNKNOWN IN ANY OTHER TILL SYSTEM.  
Price only **£3** Complete.

FULL PARTICULARS ON APPLICATION TO  
**G. R. STOKES & CO., LIM.**  
HANLEY, STAFFS.

## DISPENSING BOTTLES & PHIALS

### BEFORE ORDERING

Of any other House, please write for prices of any size  
required to either of our Warehouses—

25 Francis St., Tottenham Court Road }  
61 Halton Road, Islington } **LONDON.**  
153 Upper Thames Street, City }

ESTABLISHED UPWARDS OF 50 YEARS.

## I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.  
BANKERS: LONDON AND WESTMINSTER BANK.

## GRIFFITHS' SUPERFINE ROUGE

In 6d. and 1s. Boxes, 42s. and 84s. per gross.  
(As supplied to Jewellers and Silversmiths all over the World.)

## GRIFFITHS' PLATE POWDER

In 6d. and 1s. Packets, 42s. and 84s. per gross.  
(For Household and general purposes.)

TO BE OBTAINED OF ALL WHOLESALE HOUSES, OR OF

## T. M. GRIFFITHS,

Putty Powder, Steel Polish, & Polishing Paste Manufacturer,  
1a Upper Charles Street, London, E.C.

## G. B. KENT & SONS

Have been awarded the ONLY



A.D. 1777.

GOLD MEDAL

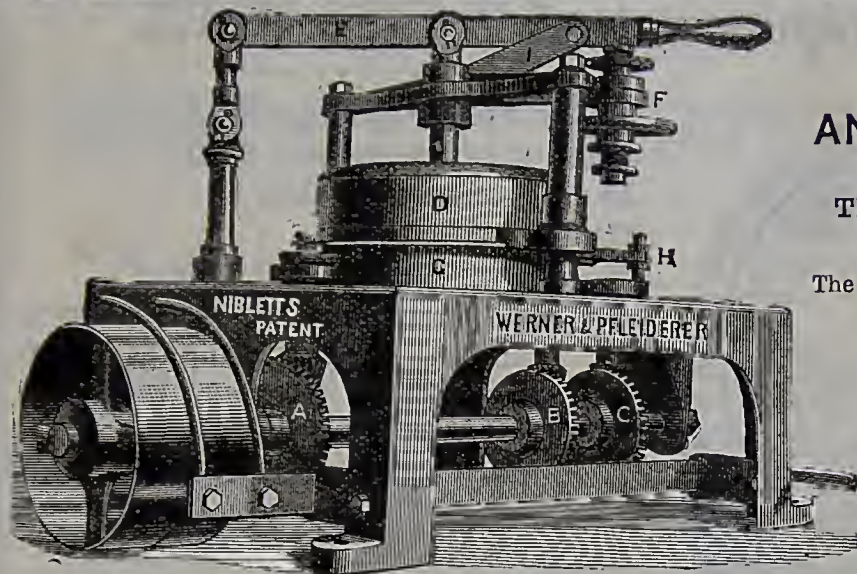


At the Paris Exhibition, 1889, for  
**ENGLISH BRUSHES**

See Advt. pp. 374 to 377 in "C. & D. Diary," 1890.



# WERNER & PFLEIDERER'S PILL-MAKING MACHINERY.



## PILL ROUNDING AND FINISHING MACHINE

(NIBLETTS PATENT).

THE ONLY PERFECT MACHINE  
FOR THIS OPERATION.

The Pill Plate takes  $\frac{1}{4}$  lb. of Pills at once, and these are rounded in less than one minute. Can be worked either by hand or power. Used most satisfactorily by some of the best firms in the trade.

WRITE FOR PRICE AND PARTICULARS.

## The "UNIVERSAL" KNEADING & MIXING MACHINE FOR PILL MASS MAKING.

Also for Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and for General Mixing and Incorporating.  
PIPING PRESSES, PILL CUTTERS, PILL COATERS.

**WERNER & PFLEIDERER,** 86 UPPER GROUND STREET, **LONDON, S.E.**  
TELEGRAMS—"PFLEIDERER LONDON."

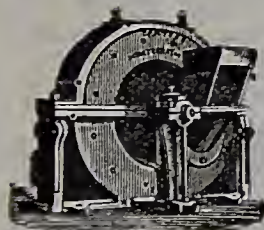
# CARTER'S DISINTEGRATORS

Will Pulverise, Granulate, or Shred almost any Mineral, Vegetable, or Animal Substance.

## NEARLY 1,300 IN USE

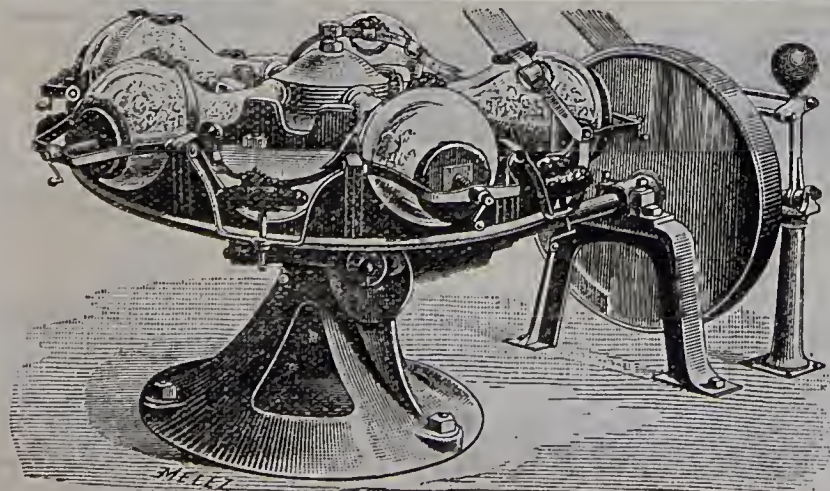
IN ALL PARTS OF THE WORLD.

For Grinding Sugar, Bark, Linseed, Ginger, Pepper, Spices, Salt, &c., this Machine is invaluable.  
Made in 9 Sizes. Illustrated Catalogue may be obtained on application.



Samples of ANY Material will be Ground free of charge.

**J. HARRISON CARTER,** 82 Mark Lane, LONDON, and 3 Rue du Louvre, PARIS.  
Telegraphic Address—Milling London.



## BEYER FRERES,

16 & 18 RUE DE LORRAINE,  
**PARIS.**

2 GOLD MEDALS PARIS EXHIBITION, 1889.

## NEW AGITATING MACHINE

For macerating and exhausting raw materials in infusion with alcohol, producing 150,000 movements per day in each metal receptacle, with a minimum of force. A considerable economy of time, labour, and capital is obtained in infusing musk, amber, benjamin, civitte, iris, grains, powders, or pharmaceutical products treated with liquids or ether.

These machines are made for 10 or 15 bottles, each containing about 15 litres, as required.



# CHALMERS' PATENT SAMPLE AND PARCELS POST BOX. THE ONLY BOX

That fulfils ALL the requirements of the POST OFFICE.



Is fastened INSTANTLY.  
Cannot open by accident.  
Is immensely strong.  
Has no corners.  
No seams, joints, nor solder.  
Nothing to scratch or tear letters.  
Is practically air-tight:—Is used  
for Flour, Cherry Blossom,  
Sanitas, and Soap-Powders.  
Dispenses with string, bags, and  
paper.  
Saves 19 minutes out of 20.

**94,500 SOLD IN THREE MONTHS**

SAVING THEIR OWN COST.

**W. B. CHALMERS,** 37 MINCING LANE,  
E.C.

AVOID RISK of CHILLS in the BATH by USING

## RANKIN'S CORK BATH MATS

MAKES THE BEST CARRIAGE MAT.  
A REAL COMFORT. RECOMMENDED BY MEDICAL MEN.  
OF ALL CHEMISTS AND DRUGGISTS.

CAUTION.—Please note these Mats are of solid Corkwood, which, being a non-conductor, is warmer than any other material to step on from the Bath.

MR. GLADSTONE PRONOUNCES "RANKIN'S CORK MATS" to be very useful. No Bath-room or Carriage is fully equipped without them. They keep the feet warm and comfortable. See that each Mat is branded "Rankin's Cork Mat," as inferior Mats, not half their value, are sometimes offered to the public. Sold by the best Furnishing Houses and Chemists. District Agencies will shortly be arranged. Sizes, 1 foot square to 45 in. by 20 in.

PRICES from 3s/- per dozen. Wholesale terms on application to

**WM. RANKIN & SONS, 10 CARLTON PLACE, GLASGOW.**

Wholesale Chemists' Agents—S. MAW, SON & THOMPSON.



## BEE SWAX.

W. H. B. PURE REFINED.

In 2-lb. cakes, in cases of about 130 lbs.

" 1 " " " 130 "

" 1/2 " " " 110 "

" 1/4 " " " 110 "

" oz. cakes in 2-lb. parcels in cases of 54 lbs.

W. H. B. PURE WHITE.

In round cakes in 2-lb. parcels, or in oblong cakes, loose } in cases of 54 lbs.  
In oz. cakes in 2-lb. parcels } and 56 lbs.  
Plain blocks of 7 1/2 lbs. in cases of 250 lbs.

WHITE WAX.

Plain round cakes in 2-lb. parcels in cases of 72 lbs.

The purity of these goods is certified by the following eminent chemists: S. P. Sharpless, State Assayer, Boston; J. W. Taylor, Associate of the Society of Public Analysts of Eng., Montreal, P. Q.; Edward Davies, F.O.S. and T. I. C. and C., Royal Institution, LIVERPOOL, Eng.; Bernard Dyer, D.Sc., F.O.S., F.I.C., Member of the Society of Public Analysts, 17 Great Tower Street, LONDON, E.C., Eng.; Wm. T. Wenzel, Analyst and Assayer, San Francisco, Cal., and may be obtained of any of the leading Wholesale Druggists in the Northern and Midland Counties.

We will deliver our goods in 5-cut, lots or quays, in any city which is the terminus of a Steamship Line throughout the Kingdom, without trouble or expense to the Buyer.

Our Goods may be obtained in single Case lots from any of the Leading Wholesale Druggists in the Northern and Midland Counties, and of

**W. H. BOWDLEAR & CO., BOSTON, MASS., U.S.A.**

Cable Add. c.s.:

Office and Warehouse—36 CENTRAL WHARF. ['Bowdlear Boston,']



# WILLIAM TOOGOOD'S

## WAREHOUSE AND SHOW ROOM,

### BURLINGTON BUILDINGS,

### HEDDON STREET, REGENT STREET, LONDON, W.

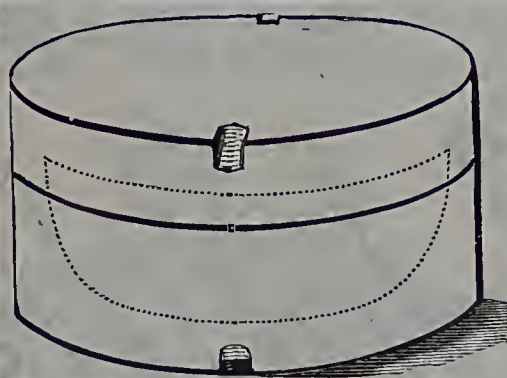
#### TOOGOOD'S

#### IMPROVED PATENT

## EARTHENWARE

## COVERED POTS

Are claimed to be the most  
perfect and convenient yet offered to  
the Trade.



*Owing to the increasing demand  
for our Patent Pots, we have in-  
troduced a Special THIN Series  
for Dispensing.*

*These Pots are beautifully  
glazed and finished, and, being  
very light, are specially adapted  
for sending by post.*

#### ORDINARY THICKNESS—

1 dr.	2 dr.	1/2	3/4	1	1 1/2	2	3	4	6	8 ounces.
1/6	1/6	1/6	1/8	1/10	2/-	2/3	2/10	3/6	4/6	5/6 per doz.

#### THIN FOR DISPENSING—

1/2	3/4	1	1 1/2	2	3	4	6	8 ounces.
1/7	1/9	2/-	2/2	2/5	3/-	4/-	5/-	6/- per doz.

# THE LACTOTHERME

## (REGISTERED TRADE MARK) OR

## INFANTS' PORTABLE MILK STOVE,

*Patented in England and Abroad.*

### ADVANTAGES.

The Lactotherme heats milk exactly to the proper temperature at which it should be given to Infants, viz., 98 degrees Fahrenheit, this being the temperature of the milk from the mother's breast.

The Lactotherme does not cause the milk to turn sour.

The Lactotherme greatly benefits the health of Infants, as by giving food at a proper temperature, Colic, Diarrhoea and Convulsions, are guarded against.

The Lactotherme is portable, and may be as effectively used in a Railway Carriage as in the Nursery.

The Lactotherme will be also found a boon to Invalids' for keeping warm Beef Tea, &c., during the night.

The Lactotherme is safe, cleanly and effective, and burns without smell.

### WHOLESALE PRICES.

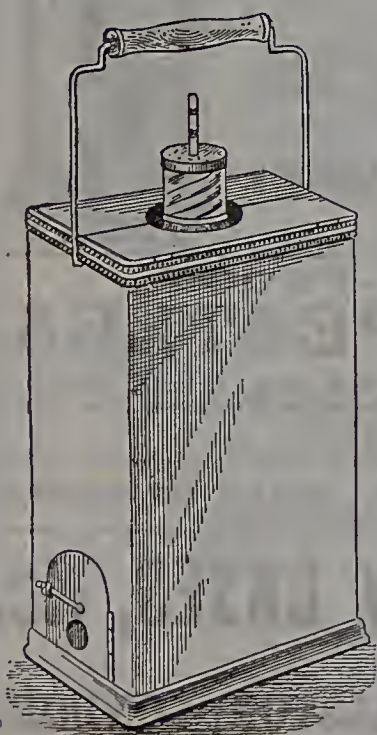
No. 1. Japanned Iron, 6/- each. No. 2. Polished Brass, 8/6 each.  
No. 3. Nickel Plated, 10/- each.

Each Apparatus is furnished complete with Thermometer, Box of Prepared Carbon,  
Box of Wicks, and Float.

### TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS







# R. H. BARRETT,

Flint Glass Bottle Works,  
THE OVAL, CAMBRIDGE HEATH, LONDON, E.

For Beauty, Cheapness, and Efficiency R. H. BARRETT'S

## WATCH SMELLING-SALT BOTTLES

EXCEL ALL OTHERS IN THE MARKET.

The Caps are all fitted with **INDESTRUCTIBLE WASHERS**, to resist the action of Ammonia and retain the strength of the Salts.

Price, assorted white and coloured, 10/6 per gross (in 5-gross lots).

Chemists' and Perfumers' Bottles in great variety, Plain or Stoppered

Telegraphic Address—"FOREFRONT LONDON."

[1]



**GLASS  
BOTTLES**

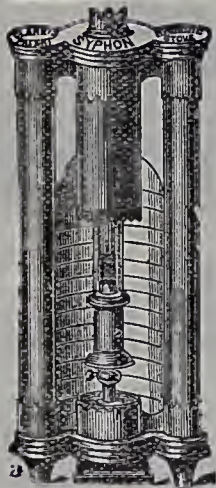
OF THE  
**BEST QUALITY.**

DISPENSING, PICKLE, SAUCE, OIL,  
MINERAL WATERS, &c., &c.

SAMPLES AND PRICES ON APPLICATION.

**E. YOULDON,**

EAST LONDON GLASS BOTTLE WAREHOUSE  
36 to 40 Great Garden Street, Whitechapel,  
LONDON, E.



## TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF CLARK'S PATENT

## "SYPHON"

(REGISTERED TITLE)

## HYGIENIC CONDENSING GAS HEATING STOVES.

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.

FOR USE IN HOSPITALS, SICK CHAMBERS, BEDROOMS, HALLS, CONSERVATORIES, CHURCHES, SCHOOLS, ETC.

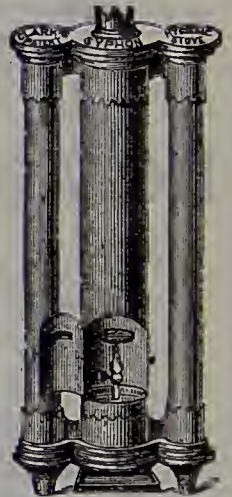
Specially suitable for patients suffering from Bronchial affections, as a moist atmosphere is obtainable when required.

FOR TERMS, PARTICULARS, AND PRICES, APPLY TO

**S. CLARK & CO.,** Patentees & Makers, Syphon Works, Park St., Islington, LONDON, N.

Telegraphic Address:—"SYPHON STOVES LONDON."

Wholesale Agents:—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.



## WEDGWOOD ACID-PROOF MORTARS AND PESTLES.

ALSO MANUFACTURERS OF

Funnels, Evaporating Pans, Electric Battery Fittings, Bed Pans, Urinals, Medicine Spoons, Physio Cups, Sick Feeders, Bleeding Basins, Medicine Measures, Eye Cups, Inhalers, Nursery Lamps, Wall Tiles, &c.

PRICE LIST ON APPLICATION. SPECIAL QUOTATIONS FOR LARGE ORDERS.

Any Article not bearing the Stamped Trade Mark "WEDGWOOD" is not made by us.

**JOSIAH WEDGWOOD & SONS, ETRURIA, STOKE-ON-TRENT.**

London Rooms: 87, ANDREW'S BUILDINGS, HOLBORN CIRCUIS.

## CHEMISTS' SHOP FITTINGS, SHOW CASES, &c.

FOR BEST WORK AT LOW PRICES SEND TO

**G. TREBLE & CO., 2 KINGSLAND GREEN, DALSTON, LONDON.**

PLANS AND ESTIMATES FREE.

SPECIAL ATTENTION PAID TO EXPORT ORDERS.



# PATENT FOLDING CARD BOXES.

## I. W. PARMENTER & CO., LIMITED

### MANUFACTURERS & PRINTERS.

### CARTOONS AND TRADE CIRCULARS, &c.

A Large Assortment of Papers, Straw Boards, Wood Pulps, and Manillas of various thicknesses, with linings of all kinds, kept in stock.



Sample Boards of all colours, lined, painted, or glazed, sent for selection. Proof Cartoons sent for approval. Trade Circulars and Advertisements executed in the best style.

### ADVANTAGES.

1. **ECONOMY.**—These Boxes are much Cheaper than the stand up Boxes.
2. **ECONOMY OF SPACE IN STORAGE.**—50 folded Boxes fit in the same space as 5 standing.
3. **ADVERTISING.**—Can be Printed on all sides, black or colours, plain or fancy. Blocks supplied and charged to account, if desired.

Send Sample Box or dimensions, state nature of contents, and number required, and Estimates, plain and printed, will be forwarded.

**NOTE.** Considerable Reduction of Price on large quantities.

I. W. PARMENTER & CO., LIMITED, are the Largest Manufacturers of Patent Folding Boxes.

### PATENT EGG BOX, No. 12,208, &c.

Telegraphic Address—"ENUMERATE."

Telephone—No. 6561.

FACTORY AND PRINTING WORKS—

7 & 8 KIRBY STREET, HATTON GARDEN, E.C.



# WILEY'S CHEMICAL ESSENCE

FOR

## LAMENESS IN HORSES.

Agents Wanted in every Town. Handbills, with Name and Address, supplied gratis.

**50 YEARS' UNBROKEN SUCCESS.**

**SOLE MAKER & PROPRIETOR, J. ROOKLEDGE, CHEMIST, EASINGWOLD, YORKS.**

TO BE HAD OF USUAL WHOLESALE HOUSES.

## TO RETAILERS OF HORSE AND CATTLE MEDICINES.



THE "NORFOLK" CONDITION DRENCHES, for Cows, Fattening Bullocks, Sheep, and Pigs  
Retail .. .. . 1/2 doz. cases, 4/6; 1 doz., 9/-; 3 doz., 22/6  
Wholesale .. .. . " 3/3; " 6/6; " 17/6

THE "NORFOLK" CORDIALINE or PAIN KILLER, for Horses, Neat Stock, Sheep and Lambs  
Retail .. .. . 1/2 doz. cases, 6/-; 1 doz., 12/-; 3 doz., 31/6  
Wholesale .. .. . " 4/-; " 8/-; " 24/-

With usual cash discounts at all London Medicine Houses.

F. SUTTON & CO., NORWICH, are now advertising these celebrated Preparations in the leading agricultural papers, and they are in constant use on the Royal Farms and by noted Breeders all over the kingdom, and especially by more than 3,000 Cowkeepers in Great Britain and Ireland. When once used they are sure to be adopted, as there are no similar preparations equal to them in the market.

HANDSOME SHOW CARDS SUPPLIED.

By Appointment to H.R.H. the late Prince Consort.

## BIGG'S SHEEP AND LAMB DIPPING COMPOSITION,

For Destruction of Ticks, Lice, &c., and Prevention of Fly,

HAS NOW BEEN USED WITH GREATEST SUCCESS FOR NEARLY HALF A CENTURY

PAMPHLETS ON APPLICATION.

LEICESTER HOUSE, GREAT DOVER STREET, BOROUGH, LONDON.

## KNIGHT'S PATENT 'RELIANCE' GUM AND LIQUID GLUE.



REGISTERED TRADE MARK.

In 1d., 3d., 6d., 9d., and 1s. Bottles.

THE CHEAPEST AND STRONGEST ADHESIVES  
IN THE MARKET.

Warranted Absolutely Free from Acid.

# KNIGHT & CO.

5 WATER LANE, GT. TOWER STREET, LONDON, E.C.

WHOLESALE AGENTS:—BARCLAY & SONS (Lim.), Farringdon Street, London, E.C.; F. NEWBERRY & SONS, King Edward Street, London, E.C.; S. MAW, SON & THOMPSON, Aldersgate Street, London, E.C. EDWARDS & SON, Queen Victoria Street, London, E.C.; THOMPSON, WALTERS, HOLE & CO. (Lim.), Curtain Road, London, E.C.



# IMPORTANT NOTICE.

THE PROPRIETOR OF

## MERE'S RENOWNED CATTLE MEDICINES

Is open to treat for the

### MONOPOLY OF THE SALE

Of these articles for

The United Kingdom, Canada, the British Indies,  
Australia, the United States, &c., &c.These Cattle Medicines have acquired an excellent reputation  
during the fourteen years they have been in the market.*They have been awarded Gold, Silver, and Bronze  
Medals at various International and Universal  
Exhibitions.***HONOURABLE MENTION, PARIS, 1889.**Suitable terms for the Monopoly Sale may be arranged. All  
information, as well as proposals, to be obtained from**P. MERE DE CHANTILLY**

Orleans, Department Loiret (France).

**"WORTH ITS WEIGHT IN GOLD!"**

## BRAGGI'S OINTMENT AND PLAISTERS.

A CERTAIN and SPEEDY CURE for  
SPRAINS, BRUISES, BURNS, WOUNDS, BOILS,  
SCIATICA, ECZEMA, PILES,

And "the thousand ills which flesh is heir to."

HUNDREDS OF TESTIMONIALS FROM WELL-KNOWN PERSONS!

Ask your Chemist for the OINTMENT or PLASTER, and

**DON'T BE PUT OFF WITH ANY OTHER.**

Sold everywhere, 1/1½. Post free for 15 Stamps.

P. BRAGGI &amp; CO., Ltd., 92 Bartholomew Close, London, E.C.

## COLTHURST & HARDING,

**BALL DENOTES  
COLOUR OF PAINT.**BRISTOL—Manufactories: Phoenix Wharf and  
Temple Gate. Offices: Temple Gate. Telegrams:  
"Phoenix Bristol."LONDON—Manufactory: Alpha Works, Millwall  
E. City Office: 16 Fish Street Hill, E.C. Tele-  
grams: "Alpha Brand London."**HARD LUSTROUS ENAMEL,**  
IN ALL THE ART SHADES.For all kinds of decoration on Wood or Iron. Dry  
with a surface like Porcelain. Sold in small or large  
Tins, or in bulk. Prices and shades on application.**WHITE LEAD, ZINC WHITE,  
PAINTS & COLOURS** OF ALL  
KINDS.**MIXED PAINTS READY FOR USE,**  
In Tins, 1, 2, 4, 7, and 14 lbs. each.**HIGH-CLASS VARNISHES**Of all kinds, for Coachbuilders, Decorators, &c.  
OIL BOILERS, REFINERS, & MERCHANTS.  
Export Orders receive special and prompt attention.

## E. FOUGERA & CO.,

No. 30 NORTH WILLIAM STREET,  
NEW YORK, U.S.A.,Importers of and Agents for the Principal  
FOREIGN MEDICINAL PREPARATIONS  
AND SPECIALTIES.

AGENCIES AND CORRESPONDENCE SOLICITED.

# WALKER, TROKE & CO.

**WHOLESALE AND EXPORT DRUGGISTS**

82 CITY ROAD, LONDON, E.C.

SOLE MAKERS OF

C. F. H. SKELTON, Esq., M.R.C.V.S.L.,  
Leyton, Essex,

Writes:— April 5, 1889.

I have great pleasure in saying that  
your Quinine Tonic Ball exceeded my  
anticipations. Horses in low condi-  
tion, and those recovering from ill-  
ness, showed marked improvement  
after treatment with them. The  
Quinine Tonic Ball should prove a  
boon to all owners of horses.J. G. CROSS, Esq., M.R.C.V.S.L.,  
Shrewsbury,

Writes:— May 20, 1889.

I have used your Quinine Tonic  
Balls, and consider them invaluable  
for animals recovering from any  
severe illness, specially from in-  
fluenza.

## GABRIEL & TROKE'S QUININE TONIC and STIMULATING GELATINE CAPSULED HORSE BALLS

(Registered No. 81,291),

Alterative, Condition, Cordial, Cough, Diuretic, Fever, Physic, and Worm Balls.

**GABRIEL & TROKE WERE THE FIRST MAKERS OF GELATINE CAPSULED HORSE BALLS.**



**S<sup>0</sup><sub>56</sub> V<sup>0</sup><sub>60</sub> R**  
18/3 18/9

SPECIAL QUOTATIONS FOR QUANTITY.

Cash with  
Order

**GEORGE PHILLIPS & CO.**  
St. Andrew's Distillery, Clerkenwell Road,  
**LONDON, E.C.**

THE  
CHEAPEST HOUSE  
FOR METHYLATED SPIRIT.

VERY HIGHLY RECTIFIED  
AND CHEMICALLY  
PURE.

**S<sup>0</sup><sub>64</sub> V<sup>2/3</sup> M**

SPECIAL QUOTATIONS FOR QUANTITY.

**PLEASE  
NOTE.**

We guarantee our **S.V.R.** to stand the Nitrate of Silver and the Ammonia tests, and to be entirely free from the offensive odour which usually characterises low-price spirits.

Pure Grain Spirit B.P., 56 o.p., 18/5 per gallon.  
" " Double Distilled, " 18/9 "  
CASH WITH ORDER.

**S.V.R.**

**SPECIALITY FOR PERFUMERY.**

This pure grain spirit, which has been thrice rectified and filtered through charcoal, is being largely used in making high-class Perfumes.

Price, 19/-, 56 o.p.; 19/6, 60 o.p. Cash with order.  
Reductions for Quantities.

**STEPHEN SMITH & CO., BOW, LONDON, E.**

**METHYLATED SPIRIT,** In Bottles, Cans,  
and Barrels.

VARNISHES, STAIN VARNISHES, MIXED PAINT, ENAMEL,  
IN SMALL PACKAGES READY FOR USE.

CHEMICALS, COLOURS, AND OILS OF ALL KINDS.

**S. BOWLEY & SON, Wellington Works, Battersea Bridge, LONDON, S.W.**

**JAMES  
BURROUGH, S.V.R.**

CALE ST., CHELSEA, S.W.

and Methyated Spirit

AT LOWEST PRICES.

WRITE FOR QUOTATIONS.

**S.V. METH.**

**JONES & COMPANY,**  
COPPERFIELD ROAD  
**LONDON, E.**

LARGEST MAKERS IN THE KINGDOM.

We are prepared to supply METHYLATED SPIRIT in  
5-gallon quantities at Lowest Prices.

**REDUCTIONS TO LARGE BUYERS.**

SAMPLES FREE.



# ANGLO-AMERICAN OIL COMPANY, LIM.

LONDON.

HULL.

GREAT YARMOUTH.

LIVERPOOL.

NEWCASTLE.

LYNN.

BRISTOL.

SOUTH SHIELDS.

STOCKTON.

HEAD OFFICES—16 ST. HELENS PLACE, BISHOPSGATE ST., LONDON, E.C.

## American Refined Petroleum.

The long established superiority of "**Tea Rose**," "**Royal Daylight**," "**White Rose**," and "**Westminster**" American Petroleum Oils, manufactured by the Standard Oil Company of the United States, is well known to the Trade and to Consumers, and no Oils are so widely and justly celebrated. Their superior burning qualities, freedom from odour and from any tendency to smoke, and their general excellence, have placed them above comparison with any and all other brands.

In order to meet the largely increasing demand for these oils, and the better to supply the Trade generally, we have arranged to import them from the United States in bulk as well as in barrels. We shall fill the Oil which we import in bulk into barrels at our own wharves, and as our cooperage facilities are modelled upon the best American methods, buyers will receive the Oil in tight and clean packages.

Our Tank Steamers, "**Manhattan**" and "**Bayonne**," in their construction, arrangements, power and size, are in advance of any tank steamers afloat, and each has a carrying capacity of 4,000 tons, equivalent to 28,000 barrels of Oil by each steamer.

We shall keep large stocks of these Oils constantly on hand at all our Importing Centres and Depôts, and in this manner be able to supply the Trade promptly. Being the representatives in the United Kingdom of the Standard Oil Company, of America, we are in the best possible position for supplying the trade on the most favourable terms.

To cover the special requirements of London buyers, we have completed the construction of a large Storage Wharf at Purfleet, which will be worked in connection with our Depôts at—

AILSA STREET, BOW CREEK, E.

CANAL WHARF, CHALK FARM ROAD, N.W.

ALBANY WHARF, ALBANY ROAD, CAMBERWELL, S.E.

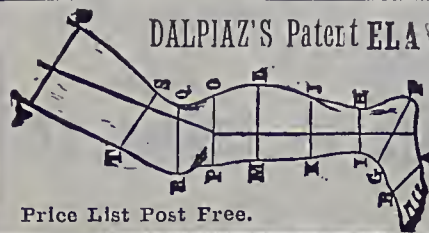


**HORN & SON.**

OFFICES FOR BRITISH AND FOREIGN

**PATENTS AND TRADE MARKS,**  
SOMERSET CHAMBERS, 151 STRAND, LONDON  
(NEXT TO SOMERSET HOUSE).

Guide to New Patent Law and Registration gratis.



DALPIAZ'S Patent ELASTIC STOCKINGS.

Send to

Mestivier & Co.,  
275 rue St. Honoré,  
PARIS,The metrical measures and  
height according to the  
annexed model in order to  
receive Stockings post free.  
Liberal reduction to the trade

Price List Post Free.

**PRECIPITATED CHALK,** WHITEST AND  
PUREST.CHEAPEST SELLERS IN THE MARKET.  
ALSO CHEMICALS, DRUGS AND OIL.

APPLY TO

**AUG. LEVERMORE & CO.,**  
8 LIME STREET LONDON, E.C.**GEORGE HAYNES & CO.**

Hampstead Cotton Mills, Stockport,

MANUFACTURERS OF

**BLEACHED AND ABSORBENT WOOLS,**

GREY WOOL, COLOURED WOOLS, &amp; JEWELLERS' SHEETS

Two Silver Medals and Diploma of Honour (Highest Award) given at Paris.  
Universal Exhibition, 1889, for Superior Quality and Manufacture.

Telegraphic Address—"HAYNES STOCKPORT."

**FOUND DEAD**

BY SANFORD'S RAT POISON.

"I have found 145 rats killed in my farm buildings by it."—C. Wilson Offord.  
 "It is the most certain remedy I have ever tried. Little pellets about the size of a pea are put in the rat holes or in their runs. I destroyed over 200 rats from one dressing with it."—U. Cook, Grange Farm, Ellesmere, Salop. It is, without doubt, the best ever introduced. Price 6d., 1s., 2s., and 3s., of Chemists.  
 SANFORD'S MICE POISON for Houses, Buildings, Corn Stacks, &c. Cannot be excelled. Has given entire satisfaction for the past 28 years. In packets 3d., 6d., 1s., and 2s. each, with directions for use, of SANFORD & SON, Sandy, Beds. Liberal terms to Chemists. Wholesale of Barclay & Son, Bangor & Son, Newbery & Sons, Edwards, and others, London (England).

**FRED<sup>K</sup> FINK & CO.,**

10 &amp; 11 MINGING LANE, LONDON, E.C.

**SPECIALITIES:** Glycerine—Gum Arabic—Gum  
Tragacanth—Pure Beeswax—Honey—Vanilloes.**MOUILLA LIQUID SOAP**

The invention of Dr. DUNCAN, St. Petersburg.

Beautifully Transparent Golden Colour. Delicately Perfumed.  
 As prescribed by most eminent Skin Physicians.—See Testimonials.  
 In handsome bottles with spritzkier tops. Retail. 6d. and 1/6  
 per bottle. Wholesale terms on application to  
 The Mouilla Liquid Soap Co., Ltd., 6 Adam St., Strand, W.C.

**EMP. ADHÆSIVUM OPT.**

16 INCHES WIDE.

On Glazed Calico, 2/9; on Shirting, 4/3 per doz. net cash.

**JOHN QUILLIAM & CO.,** Plaster Works, Manchester.  
Cowburn Street. [3]**HYDE, NASH & CO.**

16 Philpot Lane, LONDON, E.C.

SPECIALITIES—

Arabic and Varnish Gums, Glucose, Glycerine, Beeswax,  
 Honey, Rhubarb, Insect Powder, Saffron, &c., &c.  
 Country orders for original packages included in public sale purchases at fractional  
 margins.

THE OLDEST ENGLISH & AMERICAN CHEMIST  
in PARIS (founded 1808)**BOISSY late GALLOIS**

2, Place Vendôme, Corner of rue St-Honoré  
 would undertake one or two additional  
 agencies for patent Medicines, Sundries, etc.  
 Special connexion amongst Doctors  
 in Paris & Provinces.

**THE ALOFAS REMEDIES**

TINCTURES, PILLS, OINTMENTS, EMBROCATION, ETC.

LIBERAL TERMS TO CHEMISTS. Write for Pamphlet and Circular  
sent post free.THE ALOFAS COMPANY, Central Depot, 20 New Oxford  
Street, LONDON, W.C.**ALCOHOL VARNISHES.**

FIRM—A. DIDA. (Estab. 1847.)

G. LEVASSEUR & CO., CHEMICAL ENGINEERS  
(Successors of L. DIDA),108 BOULEVARD RICHARD LENOIR, PARIS.  
WORKS AT DRAVEIL (S. and O.).  
SILVER MEDAL, PARIS EXHIBITION, 1889.**OL. LAVAND. RECT.**  
(DURRANT).

This is the only real substitute for Mitcham Lavender. 1 lb. 15/, ½ lb. 8/  
 ½ lb. 4/3. 1 lb. sent post free, with first-rate formula for Lavender Water,  
 for 15/6.

G. R. DURRANT, Perfumer, HERTFORD.



TRADE MARK.

**LE DENTIFRICE REEB**

(Marque de la Cigogne—"Stork" Trade Mark)

BRONZE MEDAL, PARIS EXHIBITION, 1889.

Possesses an exquisite and penetrating perfume. Keeps the  
 teeth healthy and white. It is a certain preservative for the  
 teeth and an infallible cure for all dental affections.

Bottles at 1/8, 3/4, 5/6, 9/6, and 16/.

Discount according to quantity.

General Depot—H. REEB, 158 Avenue de  
Neuilly, S/S, PARIS.**S. SAINSBURY'S**

Prepared from the finest  
 English Lavender and  
 other most choice Scents.

176 &amp; 177 STRAND, LONDON.

Wholesale and Shipping terms on application.

**Lavender**  
**Water.**

ESTABLISHED 1835.

**DENTISTRY**

Mechanical work from impressions or models. Moderate charges,  
 inclusive of materials

**FENTIMAN & CO.,** 2 Upper East Smithfield, City, E.C. **DENTISTS,**



**CHLORIDE OF GOLD**

the best in the market. Immense quantities sold. Exported to all parts of the World.

**LOUIS ROWLAND (Refiner),**  
59 South John St., LIVERPOOL.

19/- per dozen  
15-grain Tubes  
(guaranteed)  
Postage, 2d.

**PERFUMERY**

**J. N. TAYLOR, Manufacturer,**  
67 MORTIMER STREET, REGENT STREET, LONDON, W.

**PURE WHITE BEESWAX**

Guaranteed pure, of the best quality, in blocks, cakes, or other forms. Candles, and all other articles manufactured of Beeswax, at the lowest possible prices.

QUOTATIONS FREE ON BOARD HAMBURG AND OTHER PORT

Lüneburger Wachsbleiche Wax Bleaching Works,  
LUNEBURG (GERMANY).

FLETCHER'S CONCENTRATED FLUID SHEEP DIP. Approved by Farmers and large consumers

FLETCHER'S PINO-PHENOL FLUID DISINFECTANT. Sanctioned by H.M. Board of Trade (Marine Department).

FLETCHER'S PINO-PHENOL DISINFECTANT POWDER.

FLETCHER'S CARBOLIC POWDER, 10 per cent. and 15 per cent.

LIBERAL TERMS. AGENTS WANTED. ENQUIRY SOLICITED.

Sheep Dip or Fluid Disinfectant in 40-gallon casks at special rates.

**FLETCHER BROS. & CO.,** Manufacturing Chemists, GRIMSBY  
(Contractors to H. M. Government).

**HOMOEOPATHICS**

END AT ONCE FOR **WATSON & WATSON'S** PRICE LIST & TERMS.  
3 Leadenhall St., LONDON, E.C.

43 Highest Awards over all Competitors throughout the World.

**SEABURY & JOHNSON,**  
Original Manufacturers of  
**PHARMACOPŒIAL AND SURGICAL PLASTERS,**

IN RUBBER COMBINATION.

Antiseptic Dressings and Absorbents, Bandages  
Oiled Silk and Muslin, and Surgical Dressings  
of every description.

Supplies may be obtained through any Wholesale Druggists and Dealers in  
Surgical Appliances, or from the Proprietors,

**SEABURY & JOHNSON,**  
46 Jewin Street, London, E.C.,  
NEW YORK & HAMBURG.

Trade Mark.



Registered.

**THE ASSOCIATION for the SUPPLY of PURE VACCINE LYMPH,**  
12 PALL MALL EAST, LONDON, S.W.  
SOLE AGENTS FOR DR. WARLOMONT'S CALF VACCINE.

Tubes, 2s. each; Half Tubes, 1s. each. Pomade in vials, 5s.  
HUMAN VACCINE, from healthy children only, microscopically examined and  
urce quoted. Tubes, two-thirds full, 1s. 8d. each; Tubes one-third full and Lan-  
t-charged points, 1s. each; Pin-points, 1s. 1d. each. Eighteen charged Small  
oints, 5s. Tubes, two-thirds full (same as those mentioned above, but without  
urce), in quantities for export, £5 per 100 Tubes. Pin-points uncharged, 1s. per  
zen. Vaccine Ejectors, 1s. 3d. each, including postage. Vaccinations by appoint-  
ent. P.O.O.'s (including postage, and crossed London and Westminster Bank)  
th orders, payable to  
EDWARD DARKE Secretary.

Office hours, 10 to 4. Saturdays 10 to 2.

**AUSTRALASIA.  
IMPORTANT.**

ALL Firms specially desirous of bringing their Specialities before Buyers throughout the whole of Australia and New Zealand should Advertise in THE CHEMIST AND DRUGGIST OF AUSTRALASIA. This Journal is Published Monthly in Melbourne and Sydney, and is devoted exclusively to the interests of Pharmaceutical Affairs in the Australasian Colonies. Its Literary Contents are of such a character as to render the Publication of much value to all Colonial Pharmacists, and the Circulation of THE CHEMIST AND DRUGGIST OF AUSTRALASIA is Universal so far as Australasia is concerned.

SPECIMEN COPIES and SCALE of CHARGES for ADVERTISEMENTS can be obtained on application to The London Manager of THE CHEMIST AND DRUGGIST OF AUSTRALASIA, 42 Cannon Street, London, E.C.



THE ONLY PERFECT ENEMA OBTAINABLE.

# INGRAM'S IMPROVED HIGGINSON ENEMA AND SYRINGE APPARATUS

(BY ROYAL LETTERS PATENT).

Made without Seams or Ribs by our Patent Process of dipping in a solution of India Rubber, thus adding great strength and durability.

NONE GENUINE UNLESS STAMPED WITH NO. OF PATENT 1474.

CAUTION.—The only  
Enema made without  
Ribs.



All Imitations may be  
detected by the Ribs on the  
Surface, and are always  
liable to split.

WARRANTED NOT TO SPLIT

A.—Metal Pin Valve.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is perfectly smooth on the surface, will not become hard or sticky, will not leak, and will not admit air while injecting or refilling. Specially prepared to resist the heat of tropical countries.

The great superiority of INGRAM'S IMPROVED PATENT SEAMLESS ENEMA over all others has given rise to VARIOUS IMITATIONS, and it has become imperative that the Patentees should, in order to PREVENT DECEPTION, explain the PROCESS OF MANUFACTURE OF THEIR ENEMA and the MODE OF MANUFACTURE OF IMITATIONS thereof, as they have UNDENIABLE PROOF that INFERIOR ENEMAS are positively BEING SOLD as their "ADVERTISED" PATENT SEAMLESS ENEMA.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is made by a NEW PATENT PROCESS, viz. : By repeated dipping in a solution of India Rubber until the required substance is attained. This process adds greatly to its STRENGTH and DURABILITY, and, at the same time, dispenses WITH ALL SEAMS, which, as is well known, are weak points in an Enema. This improved mode of manufacture (the result of long study and experience) enables the Patentees to produce a PERFECT ENEMA WITHOUT SEAMS, thus overcoming the great fault to be found in ALL other Enemas, viz. : SPLITTING AND LEAKING, which has always been a source of trouble.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA is fitted with IMPROVED VALVES, which prevent the admission of air with the fluid and CAN at any time BE REPAIRED, if necessary.

**CAUTION.**—Imitations of INGRAM'S IMPROVED PATENT SEAMLESS ENEMA are made of several pieces of Sheet India Rubber, which are cemented together and shaped in a mould, THUS PRODUCING RIBS ON THE SURFACE, and ENEMAS SO MANUFACTURED ARE ALWAYS LIABLE TO SPLIT AND LEAK AT THE SEAMS, AND THUS TO BECOME QUITE USELESS.

INGRAM'S IMPROVED PATENT SEAMLESS ENEMA may be distinguished from ALL IMITATIONS by its ENTIRE FREEDOM FROM RIBS OF ANY DESCRIPTION on its surface, and by having an IMPROVED METAL PIN VALVE at the suction end A ; and it is acknowledged to be the ONLY PERFECT ENEMA OBTAINABLE.

Patented in England, No. 1474, April 12, 1878 ; in France, No. 126,909, October 11, 1878 ; and in America, No. 212,939, March 4, 1879.

To be obtained of all Surgical Instrument Makers, Druggists' Sundriesmen, Chemists and Druggists, in the three following qualities:—

- No. 1a. Highly Polished, in Red, Green, Blue, Black, or White.
- No. 1b. Unpolished, in Red, Green, Blue, Black, or White.
- No. 2. Unpolished, in Drab only.

Favourably noticed in "British Medical Journal," December 18, 1879 ; in the "Lancet," January 8, 1880 ; and in "British Medical Journal," September 30, 1882.



**ANNUAL**  
**SPECIAL CIRCULATION** TO **THE MERCHANT SHIPPERS**  
**OF THE UNITED KINGDOM.**

SPECIMEN COPIES OF  
**The Chemist and Druggist**  
**FOR MARCH 22nd, 1890,**  
WILL BE SENT TO ALL SHIPPERS OF  
**DRUGS, CHEMICALS, PERFUMERY, AERATED WATERS, BOTTLES, AND**  
**DRUGGISTS' SUNDRIES OF EVERY KIND.**

The Number will be filed in hundreds of important Offices, and will no doubt be often referred to when filling future indents.  
Hence, Manufacturers of and Dealers in such Goods should take care to have their announcements in this Number.

This Circulation will, of course, be *in addition to* the regular issue of "THE CHEMIST AND DRUGGIST" to its Subscribers throughout Europe, Asia, Africa, America, and Australasia—the largest and most important Subscription List possessed by any Drug Trade Journal in the World.

Chief Office: 42 Cannon St., London, E.C.; Branch Offices: Melbourne, Sydney, & New York.



# HOMŒOPATHY

## THE IMPORTANCE

of obtaining Genuine Homœopathic Medicines was never more evident than at the present time, when Cutting Prices are resorted to by Manufacturers totally unqualified to prepare these most important and delicate Remedies. While we believe in giving the Agent as large a profit as possible, we also believe in maintaining a standard of excellence both as to quality and style of putting up. The Public also are fully alive to the importance of obtaining Homœopathic Medicines from a Reliable and First-class House.

We represent the

**FIRST ESTABLISHED**

**HOMŒOPATHIC BUSINESS**

in Great Britain, having succeeded to the original firm of **HEADLAND & CO.** (Established 1835). There is no better investment for the Retail Chemist than a selected Stock of Homœopathic Medicines. For an outlay of

**FIVE POUNDS**

We can supply Stock that will realise, at Retail Prices,

**FIFTEEN POUNDS FOURTEEN SHILLINGS,**  
or a Profit of over **TEN POUNDS.**

We have also a Splendid Selection of

**BENT GLASS SHOW-CASES,**

From 50s. to £12 12s.

The one here illustrated is the smallest, and costs 50s. net. The Contents realise, at Retail Prices, £5 5s., besides the Handsome Mahogany Show-case.



**CAMPHOR PILULES.**

<b>3/9</b>	Retail. 1/-	Retail. <b>3/9</b>
PER DOZ.		PER DOZ.

ILLUSTRATED LIST ON APPLICATION.

**BOOKS OF HOMŒOPATHIC TREATMENT**

*Supplied to Agents free of charge.*

**KEENE & ASHWELL,**  
**HOMŒOPATHIC CHEMISTS, 74 NEW BOND ST., LONDON.**